

The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1853.—Vol. XLI.

LONDON, SATURDAY, FEBRUARY 25, 1871.

(WITH SUPPLEMENT) (PRICE FIVEPENCE. PER ANNUM, BY POST, £1 4s)

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(ESTABLISHED 1842.)

The high price of tin is creating an immense demand for shares in good tin mines. At the ROYAL CONSOLS, the price of tin is now over £80 per ton. There are five lots of tin in the set; one that has been driven upon is worth 30 lbs. of tin to the ton of the lode. The supply of tin is practically inexhaustible, and the agent states that profits will be returned to the shareholders directly the machinery, which is now in course of erection, is completed. Mr. CROFTS SPECIALLY RECOMMENDS these shares for a great advance in price. The mine is situated at the head of the celebrated Goss Moor, from which millions worth of tin have been raised.

Bankers: Metropolitan Bank.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER,
41, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission:—
75 Anglo-Brazil, 4s. 3d. 15 East Caradon, £254. 3 Providence.
50 Australian Un., 11s. 100 Frontino, ss. 3d. 15 Redmoor, offer wtd.
20 Bwadrain Cons., 25s. 6d. 10 Frank Mills, 28s. 9d. 20 So. Condurow, £474.
25 Bwadrain Cons., 25s. 6d. 10 Great Laxy, £187s. 20 Sweetland Crk., £416
25 Bronfloyd, £254. 10 Great Vor, £254. 10 Taquaril, 20s.
50 Carn Camborne, 40s. 6d. 70 Great So. Chiverton, offer wanted. 15 Tankerville, £123s.
10 Chiverton Moor, £254. 20 Marke Valley, £7 11 3 25 Van Consols, 48s. 6d.
70 Chontales, ss. 9d. 25 New Lovell. 30 West Tankerville, £2 18 9
20 Don Pedro, £2 6s. 3d. 75 New Beldon, 13s. 6d. 40 West Maria, 28s. 6d.
3 Devon Great Consols. 60 Pacific, 33s. 5 W. Chiverton, £373s.
50 Drake Walls, 23s. 30 Pen'Alit, 29s. 6d. 100 Wt. Prince of Wales, 2s. 9d.
100 Eclipse, 6s. 9d. 50 Prince of Wales, 27s. 6d.
5 East Lovell, £311s. 25 Pynlimmon, 40s. 6d.
20 East Seton.
W. H. B. transacts business in every description of shares at the best market prices, and free of commission.
Daily Price-List free on application.
Bankers: The Metropolitan Bank (Limited), Cornhill, E.C.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER,
48, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

MR. WILLIAM SEWARD, STOCK AND MINING SHAREBROKER,
19, THORNTON STREET, LONDON, E.C.
Every description of shares BOUGHT AND SOLD at the best market prices.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, E.C.
NORTH LEYANT.—Mr. Y. CHRISTIAN recommends these shares at £3 10s. per share, since which the mine has paid five dividends, commencing at 8s. and gradually increasing to 15s. per share, which is the dividend now in course of payment. Mr. C. is a buyer or seller.
POLBRENE.—This mine is on the eve of giving dividends. The stamps are at work, and tin will soon be sold. Mr. C. recommends the purchase of these shares for early dividends.
WEST POLBRENE.—Mining operations have commenced, and Mr. C. also recommends the purchase of the shares. He will upon application furnish every information, with prospectus and map of the St. Agnes district.
Bankers: Bank of England.

MR. G. D. SANDY, STOCK AND SHAREDEALER,
48, THREADNEEDLE STREET, LONDON, E.C., recommends for immediate purchase the following:—Van Consols, West Jewell, Hobb's Hill, West Egar & Lyle, Tamar Valley, Aberdaunt, New Clifford, and East Llanygog.
FOR SALE:—
120 Llanarmon. 25 North Crofty. 50 Tin Valley.
25 West Egar & Lyle. 45 Great So. Chiverton. 30 East Chiverton.
50 West Great Work. 25 Lovell Consols. 75 Harewood Consols.
All communications respecting any of these shares will meet with prompt attention.

MR. JAMES STOCKER, 2, CROWN COURT, THREADNEEDLE STREET, AND MINING EXCHANGE, STOCK AND SHAREDEALER.
For cash or account, FOR SALE:—
11 Great Laxy. 10 South Aurora. 20 Bronfloyd.
20 United Mexican. 25 Van Consols. 20 South Condurow.
10 Eberhardt. 15 Sweetland Creek. 50 Eclipse Gold.
40 Taquaril Gold. 7 West Chiverton. 3 Providence.
Bankers: London and Westminster, Lothbury.

MR. THOMAS ROSEWARNE, 81, OLD BROAD STREET, LONDON.
THE FOLLOWING SHARES MUST BE SOLD, for cash or account:—
15 Aberdaunt. 150 Holmshush and Kelly. 30 West Maria.
120 Bedford Consols. Bray. 15 Perran Virgin.
30 Bedford United. 15 North Roskear. 27 Prince of Wales.
170 Chiverton Moor. 105 Pen'Alit. 150 Princess of Wales.
250 Eclipse. 450 Taquaril. 3 Wheel Seton.
10 Florence & Tonkin. 7 Terras. 150 Wt. Prince of Wales.
125 Frontino. 6 West Basset. 47 West Crebor.
75 Great Vor. 5 West Drake Walls. 50 West Caradon.
Money advanced to any extent upon good marketable mining shares.
Bankers: Bank of England. Office hours Ten to Four.

MESSRS. J. HUME AND CO., 74, OLD BROAD STREET, LONDON, E.C., STOCK AND SHAREBROKERS.
40 Taquaril, £74 pm. 1 Devon Consols, £105. 10 Kitty (St. Ag.), £94.
25 West Chiverton, 38s. 2 Carn Brea. 5 Tincroft, £49.
5 East Lovell, £304. 20 Drake Walls, 21s. 20 Wt. Tankerville, £294.
50 South Condurow, £5 10 Great Vor, £54. 10 Tankerville, £124.
50 Pacific, ss. 9d. 10 Roman Gravel, £294. 50 Prince of Wales, 30s.
20 Don Pedro, £11 pm. 20 Van Consols, £244. 10 Eberhardt.
The "Investment Record and Mining Review" for January is now ready.
Price 6d., free by post.
Bankers: The London Joint-Stock Bank.

MESSRS. WM. MARLBOROUGH AND CO.,
29, BISHOPSGATE STREET WITHIN, LONDON, E.C. (Established 16 years), have FOR SALE the FOLLOWING SHARES at prices annexed:—
25 Asheton, £44. 30 East Seton, 18s. 50 Pacific.
25 Aberdaunt, 25s. 10 Eberhardt, £134. 20 Penhalls, £254.
20 Bedford Cons., 25s. 50 Eclipse, 6s. 3d. 10m. 50 Prince of Wales, 30s.
50 Bwadrain Cons., 25s. 20 East Grenville, £344. 5 Providence, £344.
10 Blue Hills, £24. 20 Frank Mills, 25s. 10 Roman Grav., £294.
20 Bedford Uni., 21s. 6d. 100 Frontino, ss. 50 Rosewall Hill, 28s. 9d.
50 Bronfloyd, £2 6s. 9d. 20 Great Lovell, 31s. 20 Rhydallog, £34.
20 Cardigan Bay, 20s. 15 Gt. So. Chiverton, 4s. 100 Redmoor, 7s.
1 Carn Brea, £22. 15 Gt. So. Toigus, ss. 9d. 20 Sch. Frances, £35.
10 Chiverton Moor, £24. 20 Great Western, 36s. 20 So. Condurow, £434.
20 Chiv. Valley, £1 18s. 9d. 20 Great Vor, £4 13s. 9d. 10 Tankerville, £12 13s.
2 Cook's Kitchen, £204. 5 Great Laxy, £18. 5 Terras, 31s.
10 Caerphilly Col., £24. 100 Llanarmon, 20s. 1 Tincroft, £187s.
30 Chontales, 9s. 3d. 10 Marke Valley, £74. 3 Trumpet Cons., £2134.
1 Devon Consols, £100. 20 Nanettes, 21s. 50 Taquaril, 15s. 9d. pm.
20 Drake Walls, 21s. 3d. 1 New Seton, £45. 20 Van Consols.
1 Dolcoath, £132s. 10 North Lovell, £34. 3 W. Chiverton, £373s.
20 Don Pedro, £1 11 pm. 10 New Lovell, 32s. 6d. 75 W. Drake Walls, 3s.
5 Ding Dong, £14. 50 North Pool, 15s. 2 West Tankerville, £3.
10 East Caradon, £5s. 6d. 50 North Crofty, £2 18s. 9d. 2 Wheel Jane, £49.
5 East Lovell, £304. 5 North Roskear, £284. 50 West Maria, 29s. 6d.
5 East Pool, £10 17s. 6d. 25 Lovell Consols, 4s. 20 Wheel Uny, £44.
In order to prevent disappointment to purchasers residing in the country, no applications from shareholders will be entertained till Monday morning. Telegrams promptly attended to.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 21 years), is a SELLER at net prices of:—
2 Minera, 1 Devon Great Consols, 45 Trevanick, 30 Wheel Uny, 10 Wheel Kitty (St. Agnes), 3 Providence, 5 West Chiverton, 10 Maes-y-Safn, 15 South Condurow, 10 Polbrene, 50 Plymouth, 150 West Pant-y-Go, 15 North Levant, 100 West Tremayne, 20 Rose and Chiverton, 5 South Frances, 100 Great Retailack, 45 Nangles, 5 East Lovell, 50 Roman Gravel, 100 East Chiverton, 200 New Beldon, 100 Bronfloyd, 30 Blue Hills, 50 Terras, 70 Okei Tor, 80 West Drake Walls, 150 Taquaril, 250 General Brazilian, 300 Frontino and Bolivia, 200 Sweetland Creek.
Mr. BUDGE advises the purchase of Bwadrain Consols shares. If investors compare this mine with others selling at higher prices, they cannot fail to recognize it as a bona fide undertaking.

THE ROMAN GRAVELS LEAD MINING COMPANY
(NEAR THE SNAILBEACH AND TANKERVILLE LEAD MINES, SHROPSHIRE.)

Particulars of this Important and Profitable Lead Mine are to be found in PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," &c., of Friday, Feb. 24, No. 623.
Further particulars will be given in future Circulars.

MR. PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON, E.C.
Bankers: The Alliance Bank, and Union Bank of London.

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," &c., of Friday, Feb. 24, No. 623, price 6d. each, forwarded on application, contains important information on the leading Dividend Mines of Shropshire, and the Dividend and Progressive Mines of Cornwall.

THE SHROPSHIRE LEAD MINING DISTRICT.—
PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," &c., of Friday, March 3, No. 624, will contain the continuation of the Review of the Shropshire Lead Mining District.

MR. EDWARD COOKE, STOCK AND MINING SHAREDEALER, 76, OLD BROAD STREET, LONDON, E.C.
Bankers: Alliance Bank.

MR. W. H. CUELL, No. 42, CORNHILL, LONDON, E.C.
Daily price-list on application.

MR. T. A. MUNDY, STOCK AND SHAREBROKER,
38, BISHOPSGATE STREET WITHIN, E.C.
Bankers: City Bank.

MR. W. TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C., transacts BUSINESS in all descriptions of marketable SHARES on the most favourable terms, particularly the shares of Gold Mines.
W. T. can furnish his clients with the fullest particulars of the Taquaril and the Eclipse Mines, to which his business is mainly directed.
FIVE CARN BREA SHARES FOR SALE.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C., transacts business at net prices in every description of security.
SPECIAL BUSINESS in Frank Mills, Great Western, Caldbeck Fells, West Godolphin, Wheal Agar, West Tankerville, and East Seton shares.
Eight edition. Post free for seven stamps.

HOW TO INVEST, AND WHAT TO SELECT: THE CAPITALISTS' GUIDE.
"A clear and valuable reference."—Vide Press.
Published by E. J. BARTLETT, 30, Great St. Helen's, E.C.

MESSRS. W. DUNN AND CO., STOCK AND SHAREDEALERS, 3 AND 4, GREAT WINCHESTER STREET BUILDINGS, LONDON, E.C.
Bankers: National Provincial Bank of England.
FOR SALE, at prices affixed:—
20 Aberdaunt, £1 5s. 20 Great Retailack, £1 5 10 Tankerville, £12 10s. 6
20 Blue Hills, £2 10s. 20 Great So. Chiverton. 10 No. Crofty, £2 16s. 3d.
10 Bronfloyd, £2 7s. 6d. 10 No. Crofty, £2 16s. 3d. 20 Taquaril Gold, 16s.
3 Cook's Kitchen, £204. 40 Pen'Alit, £1 10s. 9d. 30 Terras.
1 Devon Consols, £101. 35 Prince of Wales, £1 8 2 Tincroft, £49.
50 Don Pedro, £1 10 3 pm 2 Providence, £25. 50 Tin Hill.
25 Drake Walls, £1 14 3d 20 Roman Grav., £9 12 6 50 Van Consols, £2 2s. 6d.
5 East Lovell, £30 10s. 45 Rosewall Hill, £1 8s. 3 5 Wt. Chiverton, £394.
25 East Seton, 19s. 10 S. Condurow, £4 12 6 10 W. Tankerville, £2 19
25 Frank Mills, 4s. 7s. 2 S. Frances, £35. 20 Wheal Agar, £1.
50 Gt. Wt. Lovell, £1 11s 10 So. Pynlimmon, 17s. 6

WANTED FOR CASH:—
So. Condurow. Tincroft. Cook's Kitchen.
North Crofty. East Basset. New Seton.
Carn Brea. South Frances. Carn Camborne.
New Lovell.
H. B. RYE, Stock and Sharedealer, 77, Old Broad-street, E.C.
Established Twenty-five Years.

SILK AND CO., STOCK AND SHARE BROKERS,
32, REGENT STREET, PICCADILLY, W.
We are prepared to negotiate the purchase or sale of STOCKS AND SHARES at the closest market prices, for CASH only.
FRANK LIMMER, Secretary.

JOHN LEAN, M.E., AND CO., STOCK AND SHAREDEALERS, 5, AUSTIN FRIARS, OLD BROAD STREET, LONDON, E.C.
J. L. late manager of Silver and Copper Mines, Chili, and more recently from Cornwall.
Gold, Silver, and other Metallic Mines examined, surveyed, and reported on at home or abroad.
The following SHARES are FOR SALE:—
15 Asheton, £4 6s. 6d. 10 Don Pedro, £1 16s. 3d. 5 Great Vor, £54.
25 Australian Un., ss. 6d. prem. 5 East Pool, £11. 20 No. Crofty, £2 18s. 9d.
25 Aberdaunt (fully paid). 30 E. Llanygog, £2 15s. 20 Pen'Alit, £1 8s. 9d.
25 Bwadrain Cons., 25s. 6d. 20 East Caradon, £254. 20 North Jane, 5s.
15 Blue Hills, £2 8s. 9d. 5 Eberhardt, £16. 10 Rosewall Hill, 28s. 9d.
5 Cook's Kitchen, £22. 20 Rhydallog, £34. 20 So. Condurow, £54.
10 Chiv. Moor, £2 5s. 8d. 25 E. Grenville, £3 6s. 6d. 5 Tankerville, £124.
50 Drake Walls, 20s. 6d. 30 Frontino, ss. 3d. 5 Terras (fully paid).
1 Devon Consols, £105. 50 Gt. So. Chiv., 4s. 6d. 3 West Chiverton, £39.
5 East Lovell, £314. 25 Gt. Lovell, 32s. 3d.

We call especial attention to the EAST LLANYGOG shares, at £2 15s.; these should be purchased at once for a considerable rise. This extraordinary mine is yielding large quantities of ore, and will no doubt turn out to be one of the richest lead properties in Wales. Aberdaunt and Terras (Tin), should also be bought.
Our Guide to Investors is now ready for issue. Copies forwarded on application, free to clients.
ENDEAN AND CO., STOCK AND SHAREDEALERS, BRITISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, 85, GRACECHURCH STREET, LONDON, E.C.
TERRAS TIN MINE.—We advise the purchase of these shares without delay, being convinced that it will soon be one of the leading tin dividend-paying mine in the country. The company is limited. We advise only limited liability companies, cautioning investors to avoid the Cost-Book System as they would a serpent.
ABERDAUNT is improved. These shares will have a considerable advance in price, and should be bought for investment.
EAST LLANYGOG.—Our Mr. ENDEAN has just returned from this mine, is convinced of its value, and would especially advise the immediate purchase of shares at £2 15s. each for a rise or investment. We have 50 shares for sale. From the important discoveries already made, and the quantities of ore being brought to surface, containing rocks of solid lead from 1 cwt. to 7 cwt. each, and parcels of ore going into the market within a few weeks of the formation of the company, and knowing the adjoining mine on the same lode has paid over £1,500,000 in profits, we feel assured this mine will be in the Dividend List almost immediately. We strongly advise it to our clients, and would suggest that, from the great success of this undertaking, other properties are being secured in the district bordering upon the same name, but should be dealt in with great caution.
Mr. ENDEAN, having recently returned from the Welsh mining districts, is in a position to advise whether to buy or sell in either mine now before the public.
All negotiable stocks dealt in for cash or account. Our bureau of mines and guide to bona fide investments, with price current, will be forwarded free on application to clients.
ENDEAN and Co., 85, Gracechurch Street, London, E.C., Members of the Lombard Exchange, Lombard-street.

MR. CHARLES THOMAS,
MINING AGENT, AND GENERAL SHAREDEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

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INVESTMENTS AND SPECULATIONS FOR 1871.
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3, GREAT WINCHESTER STREET BUILDINGS, E.C.
Business operations in Mining Shares negotiated at close market rates.
Daily Price-List on application.
Parties holding mining shares not having daily quotations, can learn their correct market value on application to Mr. THOMAS.

New edition, 1870, price 6d.
SELF HELP TO PATENT LAW
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COLONIAL AND FOREIGN PATENT LAWS.
By GEORGE DAVIES, C.E.
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Established 1835.

MR. JOHN MOSS, STOCK AND SHAREDEALER,
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.
Bankers: City Bank, Finch-lane, E.C.

MESSRS. G. LAVINGTON AND A. PENNINGTON,
44, THREADNEEDLE STREET, E.C., STOCK AND SHAREDEALERS, have SPECIAL BUSINESS in the undermentioned:—
Pacific Gold. Tankerville. Carn Camborne.
East Lovell. East Caradon. Bronfloyd.
Sweetland Creek. Taquaril. Great Rock.
Marke Valley. Tincroft. Eclipse.

TO INVESTORS.—NOW READY.
LAVINGTON AND PENNINGTON'S "MONTHLY RECORD OF INVESTMENTS," containing an exhaustive Review of the British and Foreign Stock and Share and Money Markets, &c., with an enumeration of safe investments, paying from 10 to 20 per cent. Price 6d. per copy, or 5s. annually.
G. LAVINGTON and A. PENNINGTON, 44, Threadneedle-street, London, E.C.

IMPORTANT TO INVESTORS IN BRITISH AND FOREIGN MINES, RAILWAY STOCKS, and other Securities of all descriptions.
Dividends at the rate of 5, 10, and 15 per cent.
Consult Mr. JOHN B. REYNOLDS' SPECIAL LIST OF INVESTMENTS.
Sent free by post on application to JOHN B. REYNOLDS, Stock and Share-dealer, 70 and 71, Bishopsgate street within, London, E.C.

MESSRS. E. BREWIS AND CO., STOCK AND SHAREDEALERS, 18, BISHOPSGATE STREET WITHIN, LONDON, E.C.
(Opposite the National Provincial Bank of England.)
Telegrams promptly attended to.
Bankers: The Alliance Bank, London, E.C.

MR. HENRY MANSELL, STOCK AND SHAREDEALER,
34, GREAT WINCHESTER STREET, LONDON, E.C., has the following SHARES OR SALE, for cash or account, free of commission:—
20 Tankerville, £12 10s. 6d. 10 Cwmnwl Slate and 20 Roman Gravel, £9 13 9
10 Eberhardt, £15 12s. 6d. 40 Slat Quarry (£4 10s. 6d. 80 Terras Tin
70 New Beldon, 13s. 6d. paid, £2 15s. 15 East Grenville, £234.
50 Carn Camborne, £1 18 9 25 Kxmouth Silver-Lead, 25s. 50 Holmshush and Kelly
50 East Llanygog, £294. 25s. 20 So. Condurow, £54, cum div.
110 Bryn Royallton, 11s. 40 North Crofty, £2 18s. 9d. 20 So. Condurow, £54, cum div.
30 Prince of Wales, 28s. 9d. 25 East Lovell, £304. 80 Great Ryalton, 22s. 6d.
80 W. Rhosyddol, 13s. 20 Virtuous Lady, 25s. 80 Great Ryalton, 22s. 6d.
50 Van Consols, £294. 50 New Beldon, 13s. 6d. 20 Gwydyr Park, 12s. 6d.
25 King. 75 Terras Consols, 11s. 9d. 20 Gwydyr Park, 12s. 6d.
60 New Grassing, 12s. 9d. 20 Aberdaunt. 20 Cefn Consols.
60 Harewood Consols, 5s. 35 West Tankerville, £2 18 9 25 Queen.

EAST LLANYGOG MINING COMPANY (Limited).—These shares have been in great demand at an advanced price (consequent on further important improvements having been reported from the mine during the past week). Mr. H. M. strongly advises the immediate purchase for a great rise from present quotations. Taquaril, South Condurow, Great Vor, West Jewell, North Crofty, Terras, and Van Consols also strongly recommended.
A Daily List of Closing Prices sent to clients free on application.
Bankers: London Joint-Stock Bank.

Twenty-six Years' Experience.
MR. F. W. MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.
Daily List of closing prices in British and Foreign mines published every evening, and forwarded to correspondents (free).
References exchanged. Bankers: London Joint-Stock Bank.

HOOPER AND CO., STOCK AND SHAREDEALERS,
LIFE, FIRE, AND MARINE INSURANCE AGENTS,
9, UNION COURT, OLD BROAD STREET.

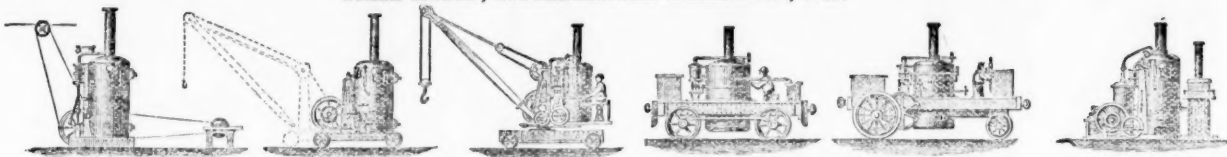
We recommend immediate investment in the EAST LLANYGOG LEAD MINING COMPANY (Limited), the shares in which, from the known value of the property, and the recent important discoveries, are in great demand; as we anticipated, they have advanced in price, and still rising. AT ABERDAUNT a third parcel of lead will be ready for market next week, and the mine looks more promising than ever throughout. These shares are certain to increase greatly in value, and should be purchased at once. Investors are advised to purchase quickly into Mexican mines, the richest field now offered for English enterprise. We are always in possession of the earliest and most reliable information. The GUATAMAZIN, advised exclusively by us, has risen in value in six months from £240,000 to £360,000. We are in a position to do even better with another mine. Confidential information to clients only.
At the rate of One Guinea per annum, we give investors information on legitimate mining properties in the United Kingdom.
Our Circular for February contains mineral statistics of the highest value, as well as a list of approved mining and other investments. Intending investors should apply for a copy immediately. Price 6d., free to clients.
FOR SALE:—Aberdaunt, 40 Terras, fully paid; 55 East Llanygog, £2 15s.; 25 New Rosario, fully paid, £1 5s.; 30 Cwm Ricket, 15 El Chico.
WANTED IMMEDIATELY, A MODERATE-SIZED FACTORY, in the City or Suburbs, with steam-power preferred.
HOOPER and Co., 9, Union-court, Old Broad-street, London.

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 36, CORNHILL, LONDON, E.C.
THE INVESTMENT CIRCULAR, published on the first Wednesday in each month. Subscription, 5s. a year, including postage; a single copy, 6d.
THE HANDY-BOOK FOR INVESTORS, comprising a sketch of the Rise, Progress, and Present Character of every species of Investment, British, Colonial, and Foreign; including an estimate of their comparative safety and profit, and in cloth, 10s. 6d.
BRITISH MINES AND MINING, comprising a comparison of Mining with other investments; a description of the Mining Districts of the United Kingdom, and a detailed account of the Tin, Copper, Lead, and other Mines in Cornwall, Devon, Salop, Wales, and the Isle of Man; with a complete Glossary of Mining Terms. Bound in cloth, 2s. 6d.
Cheques to be crossed London and Westminster or Alliance Bank.

THE CITY EXCHANGE MINING AND INVESTMENT OFFICES, 32, NEW BROAD STREET, LONDON, E.C.
ALFRED FISHER, MANAGER.
The TERRAS TIN MINE shares investors will do well to buy. We have only 35 that we can offer for sale. Apply at once. This mine will soon rank amongst the best dividend-paying mines in the West of England. Tin has advanced £2 per ton. This looks well for TERRAS, and from its prosperity mining sets are being applied for all around it.
We advise the immediate purchase of shares in the EAST LLANYGOG MINING COMPANY (Limited), at £2 15s. each. Another discovery of ore has just been made: the leader of lead is 10 in. wide, and the lode is very similar in character as well as the lead to that of Tankerville. It is believed this mine will commence returning ore at once. We hear that they will sell 40 tons—the first parcel, now preparing for the market—and early dividends are expected.
ABERDAUNT.—The recent discovery of lead in this mine is holding out well. The lode will yield 4 tons of lead per fathom.
Business promptly transacted in every available security.
The following shares should be purchased:—TAQUARIL, ABERDAUNT, EAST LLANYGOG, GEIFRON, TANKERVILLE, DEVON CONSOLS, and GREAT VOR shares.

CHAPLIN'S PATENT PORTABLE STEAM ENGINES AND BOILERS.

PRIZE MEDAL, INTERNATIONAL EXHIBITION, 1862.



STATIONARY ENGINE,
From 1 to 30 horse power.
No building required.

PORTABLE HOIST,
1 to 30 horse power.
With or without jib.

STEAM CRANE,
30 cwt. to 20 tons.
For wharf or rail.

CONTRACTORS' LOCOMOTIVE,
5 to 27 horse power.
For steep inclines and quick curves.

TRACTION ENGINES,
6 to 27 horse power.
Light and heavy.

SHIP'S ENGINE,
Winding, Cooking, and Distilling.
Passed by Government for half water.

* These engines were selected by H.M. Commissioners to receive and send away the heavy machinery in the International Exhibition. From the STRENGTH, SIMPLICITY, and COMPACTNESS of these ENGINES they are extensively USED for GENERAL PURPOSES, and also in situations where STEAM-ENGINES OF THE ORDINARY CONSTRUCTION CANNOT BE APPLIED.

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CRANSTON HILL ENGINE WORKS, GLASGOW.

ENGINES OF EACH CLASS KEPT IN STOCK FOR SALE or HIRE, and ALL OUR MANUFACTURES GUARANTEED as to EFFICIENCY, MATERIAL, and WORKMANSHIP.

Parties are cautioned against using or purchasing imitations or infringements of these patent manufactures.
AGENTS IN LONDON FOR THE SALE OF OUR MANUFACTURES: WIMSHURST AND CO.

Titanic Steel and Iron Company

(LIMITED).

SOLE MANUFACTURERS OF

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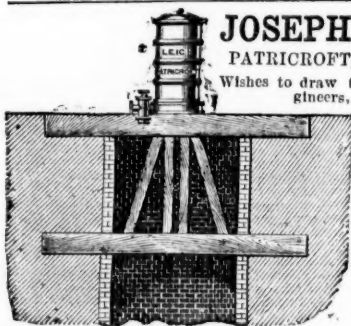
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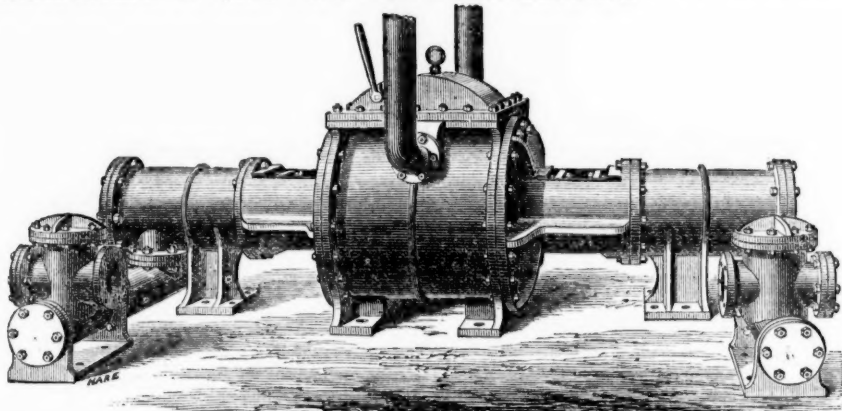
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HOLLOWAY'S PILLS.—Palpitation of the heart is frequently not only felt but heard, prevents sleep, and begets the utmost dread of impending suffocation. It is particularly recommended for removing this affection, because they strengthen the nervous and the debilitated, who are much more liable to this malady than other persons. Holloway's pills so improve the digestion, increase the action of the liver, and give activity to the bowels, that dizziness, headache, and nausea depart as the palpitation diminishes, and the sufferer at once experiences the most indescribable relief from anxiety. Holloway's pills are the best and most powerful agent in all cases of convalescence from fevers, inflammations, neuralgia, and all chronic diseases which have impoverished the blood and brain.

At the time the Furze Hill Wood Mine was suspended tin ore was £46 per ton, the mine, and Articles of Association, may be seen at the office.

BRITISH MINES.

Are those acting wisely who (while they would not sell at 394. prem., which price the shares advanced on anticipation) sacrifice their interests to present quotations? Would it not be more prudent to await the telegram, even now due, giving the result for January. Finally, is not the opinion of every

capital of \$5,000,000. The spending of DON PEDRO leads to the further remark that the "vein stuff" at the Don Pedro mine was never equal to that returned from Taquaril for the month of December last, it being at the rate of over 30 ozs. of gold per ton. We content ourselves with suggesting the following queries, leaving those more immediately concerned to form their own opinions. Are the reports upon which the company was brought out altogether correct? Or are they only intended to deceive? For the first half of January, distinct reports were received from the mine to the improvement in yield, as compared with same division of December. Are those acting wisely who (while they would not sell at 39s. prem.,) nevertheless buy at 39s. prem. in anticipation? Or are they buying on the basis of the present quotations? Would it not be more prudent to wait for the telegram, even if it should be unfavorable? Finally, is not the opinion of people

any on sale—in fact we much doubt if the total stock of this sort in London exceeds 400 tons. The demand for raw descriptions being very great smelters advanced their quotations for English on Tuesday last (21st inst.) to 74*l*. for tough, 76*l*. for select, 79*l*. for sheets of ordinary sizes, the value of India sheets (4 by 4 ft.) being 80*l*. and that of the French 82*l*. This move, as far as regards tough, has been anticipated by the trade, for the same quantity of country sold cake and ingot at the now official rate. We consequently have but little change to note in the general market, and quotations for foreign sorts were scarcely affected by the change, although additional firmness was imparted.

Messrs. Vivian, Younger, and Bond—We have again to report very considerable activity in all sorts of raw copper, and the market closes very firm at our annexed quotations. About 1000 tons of Chili bars have changed hands at our 65*t*. 10*s*. to 66*t*. 10*s*. cash, according to brand, and from 66*t*. 10*s*. to 67*t*., with prompt and to arrive. Smelters have taken several lots of ores and regulus at 13*s*. 3*d*. per unit, and all holders now ask 13*s*. 6*d*. and upwards. The price of fine foreign copper has not materially altered, but a moderate quantity has been purchased. For the first time since the market has been so plentiful, and on Tuesday, the 21*st* inst., the smelters raised their official quotations 3*d*. per ton all round, making 79*t*. for sheathing and sheets, 76*t*. for best selected, and 73*t*. for tough, which new rates are being well sustained.

IRON TRADE.—(Griffiths' Weekly Report).—The successful progress of the negotiations for peace now going on at Versailles has imparted a better tone to the Iron Market this week, the universal opinion here being that the preliminaries of peace will be settled at Versailles immediately. The iron market has been steady over the whole week, with more business doing. Efforts are being made to close two or three large parcels of rails, which have been placed over the market this week. On United States account, but as the makers have assumed a firmer attitude in respect to rails, we cannot report extensive business this week. Some good orders for bars have been given out for the Continent; the demand for hoop-iron likewise is improving, particularly the class of this iron shipped to the Southern States of America. There is a more brisk demand for ship-plates and angle-bars, and enquiries are more numerous for boiler-plates. The demand for tin-plates continues moderately good, and the late advance is sustained.—Cornhill, London, Feb. 24.

CHEMICALS AND MINERALS.—(Messrs. J. Berger Spence and Co., Manchester, Feb. 13.)—Soda: Cream carbonate lively, at 127. 5s. to 124. 10s.; white, 90 per cent., 153. 10s. to 151. 10s.; black, 80 per cent., at 142. 10s. Soda ash, 75 per cent., 157. 10s. to 156. 10s.; Bi-carbonate, 117. to 117. 10s.; salt cake, 3*l.* 2*s.* 6*d.* Glass, 3*l.* 1*s.* 6*d.* to 3*l.* 2*s.* 6*d.* Nitrate of soda has been steady, at 157. 5*s.* to 157. 10*s.* Potash—Muriate, 80 per cent. is rather more freely offered, but the price of 10*l.* and 10*l.* 5*s.* is not tempting to buyers. Prussiate: Yellow, 1*s.* 1*d.*; red, 1*s.* 1*d.* to 2*s.* Saltpetre: More business done. Foreign, 28*s.* to 30*s.*; refined, 33*s.* to 34*s.* Soda: 50 per cent., 157. 10*s.* to 156. 10*s.*; black, 80 per cent., 142. 10*s.* to 141. 10*s.* Soda ash: White and grey greatly enquired for, at 167. to 167. 10*s.* Brown unchanged at 14*l.* to 14*l.* 10*s.*; carbonate, 6*l.* per lb.—Iron Salts: Green and rusty coppars 14*l.*, 52*s.* 6*d.* to 55*s.*; dry, 52*s.*; Prussian blue, 1*s.* 6*d.* to 1*s.* 10*d.*; chloride of iron, 6*l.*—Copper Salts: Sulphate of copper, 23*l.* to 23*l.* 10*s.*—Arsenic, 6*l.* 15*s.* to 7*l.* 10*s.* for fine white powdered.—Acid: Tartaric acid, at 1*s.* 4*d.* to 1*s.* 4*½d.*; Sulphuric, 7*½d.* to 8*d.* per gallon. 37. 1*s.* to 37. 1*s.* 6*d.*; carbolic, 1*s.* to 1*s.* 4*d.*—Magnesia, 4*l.* 17*s.* 6*d.* to 4*l.* 17*s.* 6*d.* for refined.—Oils: Olive, 48*s.* to 50*s.*; spindle oil, 4*l.* 10*s.* to 4*l.* 6*s.* per gallon. Pure white Norwegian cod liver oil, 6*s.* 6*d.* to 7*s.* per gallon.—Pitch 14*l.* to 16*s.* asked.—Benzole more enquired after, at 2*s.* 5*d.* to 2*s.* 6*d.* for 30 per cent.—Disinfectants: Patent, 5*l.* per ton; Carbolic, 10*l.*—China-clay, 22*s.* per ton.—Pyrites: There is little change, the demand for 24 per cent. is still strong, at 10*l.* to 10*l.* 10*s.* to 10*l.* 10*s.* Phosphates: Mineral, 6*s.* to 6*s.* 6*d.* for 60 per cent. Estramandua, 1*s.* 2*d.* per unit; soluble phosphates, 2*s.* to 30 per cent., 2*s.* to 2*s.* 3*d.* per unit; 50 to 60 per cent. at 2*s.* 6*d.* per unit.—Manganese 7*s.* to 8*s.* 6*d.* for 80 per cent.—Iron Ore: Hematite, 16*s.* to 18*s.*; Colitic, 6*s.* 9*d.* to 7*s.* 6*d.*

The MINING SHARE MARKET has been dull and depressed this week, and prices, with few exceptions, have given way. The mines mostly dealt in have been West Chiverton, Wheal Grenville, South Conduurrow, Wheal Uny, Carn Brea, Tincroft, East Lovell, Prince of Wales, Van Consols, Hington Down, Marke Valley, Great Retallack, East Wheal Grenville, South Frances, North Crofty, Perran Wheal Virgin, Cook's Kitchen, South Herodsfoot, West Prince of Wales, and a few others. The price of copper, which is the most favourable feature of the week, has risen 3*l*. per ton, though the standard is not equally favourable.

West Chiverto have been flatter, and declined to 37, but leave off 37; to 38½. The meeting has been postponed till the end of March, owing to a letter from the agent, stating that from a variety of unavoidable circumstances arising from the long and severe winter, the usual quantity of lead could not be sold in time for the dividend at the regular time, and they ask for a postponement. They also state there are some points to come off shortly, which they fully believe will be of great importance for the future. There can be no doubt, however, that this postponement of the dividend has had a bad effect on the market, and caused many sellers. Carn Brea, 52½ to 55; Cooks Kitehen, 19½ to 20; Devon Great Consols, 97½ to 102½; Drake Walls, 20s. to 22s. 6d.; Bedford Consols, 2½ to 2½; Bedford United, 20s. to 22s. 6d.; Bronfloyd, 2½ to 2½; Bwlch Consols, 2 to 2½.

Great Wheel Vor, $4\frac{1}{2}$ to 5; the month's tin (20 tons) realised the sum of 1626l. 15s.; good progress is being made in clearing up Ivey's shaft, and so far as seen no damage has been done to the pitwork; at Edwards's shaft the lode continues worth 100l. per fathom; in the winze 10 fms. east the lode and branches for 6 ft. wide are valued at 80l. per fm. Chiverton Moor, 2 to 2½; East Caradon, 5½ to 5½; East Lovell, 30 to 31. Prince of Wales shares have been flat, and leave off 25s. to 30s.; the silver ore sampled this week will be sold on Wednesday, and consists of 15 cwt. of first and 2½ tons of second quality, all raised in about five weeks. East Seton, 1 to 1½; East-Wheel Grenville, 3½ to 3½; Great Laxey, 18 to 18½; East Chiverton, ½ to ¾. Hingston Down have become in request, at 15s. to 20s., and the mine improved. Marke Valley, 7½ to 7½. Great Retallacks have been in better request, at ½ to ½; the elvan has been got through, and it is hoped the lode may be cut very shortly. South Herodsfoot also, from a favourable change in the ground, have become in better request, at 15s. to 25s. Nangiles, 1 to 1½; New Beldon, ½ to ¾; New Seton, 40 to 45; North Croft, 2½ to 3; North Lovell, 4½ to 5½; North Rosken, 9 to 9½.

Okel Tor, 15s., 20s.; Pen'Alft, 29s. to 31s.; Penrhyn, 13 to 13½; Perran Wheal Virgin, 20s. to 25s.; Providence Mines, 34 to 36; Rosewall Hill and Ransom, 29s. 6d. to 30s.; South Frances shares have advanced to 32½, 35; Spearn Moor, 18 to 21; Tan-yr-Alft, 1½ to 1½; Tinicroft, 48 to 50; Trumpet Consols, 21 to 22; Van, 54 to 56; Van Consols, 2 to 2½; West Basset, 7s. 6d. to 12s. 6d.; West Caradon, 1 to 1½; West Frances, 30 to 35; West Maria and Fortescue, 30s. to 32s. 6d.; West Pant-y-Go, 3½ to 4; West Seton, 125 to 135; West Tankerville, 23 to 3; Wheal Bassett, 40 to 50; Wheal Crebor, 12s. 6d. to 15s.; Wheal Grenville, 4 to 4½; Wheal Jane, 47½ to 50; Wheal Kitty (St. Agnes), 9 to 9½; Wheal Uny, 44 to 44.

South Condurow shares have declined since the meeting to 4½, 4½, ex div.; the accounts, by crediting tin sold up to the day of the meeting, and charging up the costs to the end of December only, are made to show a profit on four months' working of 1420*l.* 11*s.* 4*d.*, and a dividend of 5*s.* per share (or 1530*l.* 15*s.*) was declared. The report of the mine was favourable, and the agents hope to increase the returns. Roman Gravels, 9½ to 10; the mine has sampled 100 tons of lead ore for the month. Tankerville, 12½ to 13½; the sale of lead is 75 tons, at 12½ *s.* per ton.

Australian United, $\frac{1}{2}$ to $\frac{3}{4}$; the advices, which will be found in another column, are considered the best yet received from the mines. At the Central Mine gold to the value of 1200*l*, has been raised in five weeks, and the main gutter not yet reached, and from the agent's reports their appears to be very little doubt that with fresh capital the mine will soon be in a paying condition. They consider that the outlay of a few thousands will soon lead to handsome dividends. Don Pedro, $2\frac{1}{2}$ to $2\frac{3}{4}$; from the advices, which appear in another column, the returns show a loss of 540*l*. 10*s*. 6*d*. on the month. Chontales, $\frac{1}{2}$ to $\frac{3}{4}$; Eberhardt and Aurora, $1\frac{1}{2}$ to 1*6*; Frontino and Bolivia, $\frac{1}{2}$ to $\frac{3}{4}$; Pacific, $1\frac{1}{2}$ to $1\frac{3}{4}$; St. John del Rey, 22 to 24; Sweetland Creek, 4 to 4*1*.

It does not appear to be generally known that under the new Stamp Act the adhesive stamp used for transferring shares in cost-book mines must be cancelled by the vendor, who should write across it his name or initials, together with the *date of transfer*. The penalty for not doing this is 10%.

The Market for Mine Shares on the Stock Exchange during the week has been dull, and only a small amount of business transacted. Fluctuations in prices have, in several instances, been violent, the fall in West Chiverton being the most prominent, and also Taquaril—in the latter simply from large realisations by weak holders, and in the former from rumours of a falling off in the mine. From Great Vor the report is read rather more favourably, and shares are steady at 4½ to 5½. Tinercofts continue at 48½ to 49½, and East Lovells at 30 to 31, but shares in tin mines are generally flatter, owing to the decline in the price of tin. Sweetland, 4 to 4½; the directors have declared a dividend of 4s., and the reports from the mines are favourable. General Brazilian, Don Pedro, St. John del Rey, Port Phillip, Eberhardt, and Birdseye Creek have been chiefly dealt in. Foreign

mines are in fair request. Van shares are firm, and in active demand at 55 to 56. The sampling on Tuesday next will be 330 tons of lead and 100 tons of blende. The report from the mines is of the usual satisfactory character. Roman Gravel, 9½ to 10; the mine is looking extremely well. Tankerville Mine is very favourably reported on. Subjoined are the closing quotations:—Assheton, 4½ to 12½; Devon Great Consols, 95 to 105; East Caradon, 5½ to 5½; Great Laxey, 17½ to 18; West Chiverton, 36 to 38; Almada, 1½ to 1½; Cape Copper, 9 to 10 prem.; Don Pedro, 1 7-16ths to 1 9-16ths prem.; Eberhardt, 15½ to 16½; Eclips, 1½ to 1½ prem.; Frontino and Bolivia, 5-16ths to 7-16ths; General Brazilian, par to 1½ prem.; Pacific, 1½ to 1½; Port Phillip, 1 to 1½; St. John del Rey, 22 to 24; Sweetland, 4 to 4½; Taquaril, 1 to 1 prem.; United Mexican, 4 to 4½; Chantales, 1 to 1½.

A cost-book company is in course of formation, for working WHEAL DANIEL, which is situated at Chacewater, adjoining Great Wheal Busy, but separated from it by a cross-course, which is an effectual barrier to the ingress of water from that mine. The company is to consist of 2000 shares, of 17 10s. each, and the present proprietors are to receive 3600, for their interest, including the materials on the sett. The engine-shaft was sunk to a depth of 48 fathoms about 60 or 70 years since, and a large quantity of good stuff was raised. The sett is 1 mile in length by about 1 mile in breadth. The object of the company is, in particular, to develop the tin lodes, of which there are at least four well defined and distinct. There are also copper lodes in the northern portion of the sett, and a valuable silver-lead lode, which runs through the mine, from which considerable quantities of lead have been and are still being raised. It is estimated that 20000 will suffice for the necessary erections and for working the mine. The agents who have inspected the mine concur in the opinion that the mine is an excellent speculation, and that if properly developed it will prove as profitable as the surrounding mines.

The GOLDEN UNITED MINES are about to be worked by a cost-book company, in 3000 shares, and it is estimated that an outlay of from 80000 to 100,000, will bring the mines into a paying state. The mine is situated in the parish of Perranzabuloe, and the deepest point wrought is 127 fathoms below adit. The engine-shaft is down to the 107. The 87 is driven south as far as Maxwell's shaft. The first 30 fms. driven was not altogether so productive, after which the lode very much improved, and a course of ore was driven through upwards of 40 fms. long, worth at the present time 300 per fathom. Maxwell's shaft is sunk 2 fms. below the 87; in the bottom of the shaft the lode is worth 400 per fathom. This is a new feature to the mine, and is supposed to be the north shoot of ore from the adjoining mine dipping into the shaft. The agents who have reported upon the property express a high opinion of the mine, and seem convinced that it is capable, with adequate machinery and judicious management, of being brought into a permanently profitable condition.

The applications for shares in the CWM VRON MINING COMPANY have been very large, and the list will be shortly closed. The recent discovery not only fully maintains its value, but increases in richness as the development progresses.

The GNOLL COLLIERY COMPANY (to which attention was directed in last week's Journal) has been formed with a capital of 35,0000, in 7000 shares of 50 each, for the purpose of acquiring the well-known Gnoll Colliery, which has been closed for upwards of 60 years, owing to Gnoll Castle and the estate having, during that period, been used for residential purposes. It is situated close to the town of Neath, and in the heart of the coal formation of South Wales. At its previous working, notwithstanding many difficulties now removed, it yielded large fortunes to its proprietors. An outlay of 13,5000, is estimated to be ample to put the colliery into a position equal to an output of 300 tons per day, this return being made from the upper seams alone. This limited rate of production, calculating the profit at 1s. 9d. per ton, will yield an annual profit of 68250, after deducting all working and transport. It is urged that an immediate, permanent, and increasing source of profit will be realised from the local trade alone, at Neath the consumption being 500 tons per week, at present supplied from distant collieries. The tin and iron works situated in the locality consume more than 3000 tons per week, also supplied from remote sources. The favourable position of the colliery and the quality of its coal will, it is thought, command the whole of both of these trades. Messrs. Shelford and Robinson, of Westminster Chambers, state that the three seams originally worked are capable of yielding 1,420,000 tons, while the underlying seams, which can be opened up as required, will yield upwards of an additional 5,000,000 tons, assuring at the computed rate of 300 tons per day a supply for 76 years. The lease is granted on favourable terms, the dead rent being 30000, increasing to 50000 in two years, and merging in the royalties, which are only 6d. and 4d. ton on coal and ironstone. The capital is divided into 4400 shares, of which 3000 will be issued as 7 per cent. preference shares (class A), and the remainder (class B) will be issued as required, either as preference or ordinary deferred shares, and 2600 ordinary deferred shares (class C) to be issued to the present proprietors of the lease of the colliery, representing its present value: 1480 of the 3000 (class A) shares have been already subscribed for, and subscriptions for the remaining 1520 are invited.

At the Truro Ticketing, on Thursday, 4478 tons of copper ore were sold, realising 18,458 2s. The particulars of the sale were—Average quantity, 102 7s.; average produce, 6½; average price per ton, 4 2s. 6d.; quantity of fine copper, 300 tons 12 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Jan. 19.	3767	1014 10 0	6½	£3 16 9	12s. 2d.	£60 16 0
Feb. 2.	2645	102 2 0	6½	4 0 0	12 1	60 9 0
23.	4478	102 7 0	6½	4 2 6	12 3½	61 9 0

Compared with the last sale, the advance has been in the standard 1½, and in the price per ton of ore about 1s. 4d.

TIN TRADE.—The Standards of Tin Ore were reduced on Feb. 18, and are now as follows:—Common, 122s.; superior common, 123s.; fine, 124s.; superior fine, 126s.

At Wheal Owles quarterly meeting, on Feb. 17, the accounts showed a profit of 531 11s. A dividend of 6000 (71 10s. per share) was declared, and 19917 19s. 9d. carried forward. The work performed during the quarter was—134 fms. 2 ft. 9 in. driven in levels, and 66 fms. 1 ft. 6 in. sunk in shafts and winzes. They have 58 paces stopping for tin on tuff, and 19 paces working on tribute.

At the North Levant Mine meeting, on Wednesday, the accounts showed a credit balance of 1927 10s. 7d. A dividend of 15000 (15s. per share) was declared.

At South Condurrow Mine meeting, on Thursday (Mr. E. King in the chair), the accounts for the four months showed a credit balance of 21807 8s. The profit on the four months' working was 14207 11s. 4d. A dividend of 15300 10s. (6s. per share) was declared, and 6497 15s. carried to credit of next account. Details will be found in another column.

At New Wheal Lovell meeting, on Feb. 15, the accounts showed a balance of loss on the four months' working (up to the end of November) of 131 1s. 11d., and a debit balance up to the same period of 657 19s. 2d. A call of 2s. per share was made. The report of the manager stated that he had great pleasure in saying the prospects of the mine were never so good as at the present time, and with a continuance he hoped shortly to be in a position to leave profits for the shareholders.

At West Great Work Mine meeting, on Tuesday, the accounts for four months to end of December showed a credit balance of 721 16s. 9d. A call of 2s. 6d. per share was made. [The report of the agent will be found among the Mining Correspondence.] This mine has greatly improved.

At South Great Work Mine meeting, on Tuesday, the accounts for four months to the end of December last showed a debit balance of 1681 19s. 9d. A call of 2s. per share was made. The report of the manager, which was considered encouraging, was adopted.

At the Old Treburgett Silver and Lead Mine meeting, yesterday (Mr. Craig in the chair), the report of the directors and balance-sheet was received and adopted. Mr. Masey (the managing director) stated that at the 20 a lode had been cut worth 5000 per fathom. Details will appear in next week's Journal.

At the Grenver and Wheal Abraham meeting yesterday, the report of the directors and a balance-sheet were received and adopted. A satisfactory report was read from the manager, which, together with the details, will appear in next week's Journal.

At the Penryn Mining Company meeting, on Thursday (Mr. H. W. Lindow in the chair), the accounts, made up to the end of December, showed a credit balance of 8854 14s. 6d. The report and accounts were received and adopted. Since the meeting an improvement of considerable importance has taken place. Details in another column.

At the English and Australian Copper Company meeting, on Wednesday (Mr. Routh in the chair), the profit realised was not sufficient to enable the directors to declare a dividend. Details in another column.

At the Plumas Gold Mining Company meeting, on Thursday, the accounts showed that 1917 10s. 7d. remained due to the company for arrears of allotment money and call. The directors believe a considerable portion of this amount can be recovered, or the shares may be forfeited. There is a claim for preliminary expenses, consisting of printing and advertising, not yet paid, amounting to 637 19s. 6d., and which is under the consideration of the board. The directors feeling every confidence in the speedy success of the undertaking, purpose to make arrangements amongst themselves and a few gentlemen interested in the concern, in order to guarantee the completion of the contract already entered into for the purchase of the Kettle Mining Estate. With the object of carrying out this arrangement, the directors have made provisional terms with Prof. Vincent, subject to the approval of the shareholders, whereby that gentleman will undertake to proceed at once to California, there to superintend the settlement of the purchase, and to take steps at the mines to prove the accuracy of his report, and to hand the property to the authorised agent of the company. The directors are strongly impressed with the increased value the undertaking would derive if the Caledonian Mine with its two mills were secured. A resolution was passed empowering the directors to purchase the Caledonian Mine, adjoining, on the best terms, and the shareholders to subscribe the 1000 shares required for that purpose.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 115,9950, which is represented by a corresponding decrease in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there was shown an increase in the "public deposits" of 836,9750; in the "other deposits" of 811,3790; and in the "rest" of 13,7790; together, 1,662,1330, and a decrease in the "seven day and other bills" of 20,9380, and 1,642,0980; and deducting therefrom 1,532,5800, the increase in the "other securities" on the other side of the account, there remains a total increase in the reserve of 102,7180.

COAL MARKET.—The supply has this week been large, 215 ships having come forward. The effect upon house coal was considerable, causing a fall in price of about 2s. per ton. Hartleys declined 3d. to 6d. Hetton Wallsend, 18s.; South Hetton Wallsend, 17s.; Lambton Wallsend, 17s.; East Hartlepool Wallsend, 17s.; Russell's Hetton Wallsend, 15s.; Eden Main, 15s.; Hetton Lyons Wallsend, 15s.; South Kellie Wallsend, 15s. 3d.; West Hartley, 15s. 3d.; Hastings Hartley, 15s. 3d. Unsold, 30; 90 ships at sea.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in January was 638,630 tons, against 761,565 tons in the corresponding month of 1870, showing a decrease of 122,935 tons. The particulars are—From the Northern Ports, 229,803 tons; Yorkshire, 23,495 tons; London, 4758 tons; Liverpool, 51,024 tons; Severn Ports, 281,827 tons; and Scotch Ports, 47,723 tons. The increase was—London, 316 tons; Liverpool, 11,169 tons. The decrease—Northern Ports, 90,265 tons; Yorkshire, 4882 tons; Severn Ports, 28,785 tons; Scotch Ports, 10,488 tons.

WHEAL BASSET.

WANTED, a MANAGING AGENT for this Mine.—Application, with testimonials, to be made personally at the Account-house, on Monday, the 27th inst., at noon. Dated 17th February, 1871.

MINING ENGINEER WANTED.

WANTED, a PRACTICAL ENGINEER, to take a SECOND MANAGEMENT OF LEAD MINES IN SPAIN. Must speak Spanish. Address, with copies of testimonials, to JAMES M. BURNUP, Dunster House, Mining-lane, E.C.

SPELTER WORKS.

WANTED, a THOROUGHLY PRACTICAL WORKING FOREMAN. Must read and write well. Apply, stating experience and wages required, to "A. B." MINING JOURNAL Office, 25, Fleet-street, London.

TO FURNACE MANAGERS.

WANTED, a THOROUGHLY COMPETENT PERSON as FURNACE MANAGER for a SMELTING WORKS IN SOUTH WALES. He must understand the MIXING and SMELTING OF HEMATITE IRON ORES, and have had considerable experience in the MANAGEMENT OF FURNACES, and in the production of GOOD BRANDS OF PIG-IRON. Address, with copies of testimonials, and stating past experience and salary required, to "The Smelting Company," MINING JOURNAL Office, 25, Fleet-street, London.

WANTED, a VIEWER AND UNDERGROUND MANAGER for IRON ORE MINES, near WHITEHAVEN. He must have a practical knowledge of mining, and be competent to survey above and below ground. Enquiries, and applications with references, to be addressed "Box 89," Post-office, Whitehaven.—Whitehaven, 16th February, 1871.

TO MINING COMPANIES, PROMOTERS, AND OTHERS.

A GENTLEMAN (having offices westward) of great ability, large experience, good connections, and high recommendations, is desirous of SECURING THE MANAGEMENT OR SECRETARYSHIP OF TWO OR MORE PUBLIC COMPANIES. His services would be found invaluable. Address, in first instance, "W." Post Office, Chancery-lane, London.

MR. HUBERT BANKART, who is NOW IN NEW YORK, and has had twenty years' experience in Mining Operations in various parts of the world, OFFERS HIS SERVICES TO EXAMINE AND REPORT UPON ANY DESCRIPTION OF MINERAL PROPERTY IN THE UNITED STATES OR MEXICO, AND ON THE BEST MODE OF REDUCING THE ORES; and from his long practical management and connection with the Gold and Silver Mines of California, Nevada, and adjacent districts, intending purchasers and companies holding interests in the rich silver deposits of Nevada, Utah, Idaho, and Montana, will find this an opportunity of insuring an immediate and reliable examination, without incurring the expense of specially sending parties from England for that purpose. Telegrams or letters addressed to him at 9, Clement's-lane, Lombard-street, London; Messrs. HADEN and Co., 33, Chambers-street, New York; or Toiyabe Silver Mining Company, 224, Walnut-street, Philadelphia, will meet with prompt attention.

SUREST AND MOST ADVANTAGEOUS INVESTMENT OF FUNDS, by acquisition of a COLLIERY, situated in AUSTRIA, intersected by two railway lines, containing about 800 millions cwt. COAL, of excellent quality. The field is worked by three shafts. For particulars, address to "C. N. B.," 45, Dronow-street, Bradford.

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104 feet of 6 inch PUMPS, complete. About 900 feet CHAIN, little used, proved up to 6 tons. An 8-horse SEMI-PORTABLE ENGINE, little used, in thorough order. Several hundredweight of TRAM IRONS, WAGONS, SLATE PLANE, &c., all suitable for quarry work. May be seen at STERT QUARRY, near Totnes, Devon. For particulars, address G. P. FRIEND, Kingsbridge.

SWEETLAND CREEK GOLD MINES (LIMITED).

Notice is hereby given, that the Directors have this day DECLARED A DIVIDEND OF FOUR SHILLINGS PER SHARE, free of income tax, PAYABLE on and after the 28th inst.

The Transfer-books will be closed from the 23rd to the 28th inst., both inclusive. By Order, W. J. LAVINGTON, Secretary.

9, Union-court, Old Broad-street, February 21, 1871.

THE VAN MINING COMPANY (LIMITED). Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at their offices, 9, Union-court, Old Broad-street, London, on TUESDAY, the 28th instant, at One o'clock precisely.

The Transfer Books will be closed from the 21st instant until after the meeting. By Order, W. J. LAVINGTON, Secretary.

February 10, 1871.

LEAD MINING IN WALES.

WEST RHOSWYDDOL MINE is situated a FEW MILES from the town of MACHYNLLETH, and is locally considered to be a PROPERTY OF HIGH PROMISE. Peculiar interest is attached to it by reason of its immediate proximity to a number of the most valuable mines of the district, amongst which Dyffryn, Rhoswddol, Cwmbyr, and Cae Conroy are the most noticeable; nearly all the lodes traversing these sets, and from which their valuable returns of ore are procured, converge in West Rhoswddol sett, and at their junctions are expected to make great deposits of ore.

EXTRACT FROM CAPT. WILLIAMS'S REPORT. "WEST RHOSWYDDOL.—We have found the lode producing ore up to the eastern boundary and at the great cross-cut, and have also proved a junction on the west, as well as on the east. It is, in my opinion, simply a matter of time as to the development of this undertaking, and of the establishment of the West Rhoswddol Mine as a splendid property."

Messrs. LISCOMBE and CO., Sharebrokers, 32A, South Castle-street, Liverpool, STRONGLY RECOMMEND THE PURCHASE OF THESE SHARES.

MESSESS. W. BRUNTON AND CO., SAFETY FUSE MANUFACTURERS, REDRUTH, CORNWALL; AND BRYMBO, NEAR WREXHAM.

THE LONDON AND PROVINCIAL INVESTORS' SHARE

EXCHANGE (POWELL, L. DIXON, AND CO.), 25, CHANGE ALLEY, LOMBARD STREET, LONDON, E.C. BUY AND SELL every description of Stocks and Shares at close market prices net. Investors and capitalists should read the "Share Exchange Times," published by P. D. and Co. at the above offices. It contains special information upon Van, Tincoff, and other leading mines. Read our remarks on page 155 in this day's Journal on Taquaril, Roman Gravel, Van Consols, Eberhardt, &c.

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CWM VRON.—MR. C. A. POWELL is prepared to FURNISH all PARTICULARS with regard to this mine. An improvement of considerable importance has just taken place.

T. R. COMYN, STOCK AND SHAREDEALER, 31, THREADNEEDLE STREET, LONDON, E.C.

Investors in mines will do well to apply to Mr. COMYN for shares in WEST JEWELL and EXCELSIOR TIN, and HARWOOD CONSOLS COPPER MINES. He has business in these shares at such prices as must leave a very large profit either for sale hereafter or for investment. Every description of Stocks and Shares dealt in. References given. Bankers: National Provincial Bank of England, E.C.

THE UNDERSIGNED TRANSACT BUSINESS AT DEALING PRICES, net, in the following—(others not named, BOUGHT or SOLD, if practicable):—

Boulford.	Margaret.	Tincoff.
Cook's Kitchen.	North Crofty.	Tankerville.
Carn Camborne.	New Lovell.	West Chiverton.
Dolcoath.	Providence.	West Franches.
Drake Walls.	Penryn.	West Tankerville.
East Lovell.	Prince of Wales.	West Seton.
East Basset.	Plympton.	Wheal Uney.
East Seton.	Rosewall Hill.	Wheal Agar.
East Caradon.	Roman Gravel.	Wheal Jane.
Great Lovell.	South Franches.	Wheal Crebor.
Kitty (St. Agnes).	Spear Moor.	

Parties enquiring state number, when all communications will meet prompt attention.

FOR SPECIAL SALE:—25 Terras Tin, 50 Prince of Wales, 35 East Seton, 10 Penhalls, 5 Trumpet Consols, 15 Rosewall Hill, 20 New Rosario, 10s. paid, 20 Phoenix Silver, 30s. paid. JAMES BRECHLEY, 32, Nicholas-lane, Lombard-street, London, and Mining Exchange (Established Eighteen Years).

MR. THOMAS THOMPSON, JUN., STOCK AND SHAREDEALER AND MINE AGENT, 5, WHITEHALL, S.W.

Mr. THOMPSON advises the immediate purchase of THORNHILL REEF GOLD shares (Victoria). The issued capital is only £15,000, which amount will contrast favourably for dividends with some of the more pretentious companies having immense capital. The mine is fully proved, and has large reserves already laid open.

NOTICE.

INVESTORS' GUIDE should be consulted by all Capitalists seeking SAFE AND PROFITABLE INVESTMENTS. INVESTORS' GUIDE contains the most reliable information relative to Mining, Banking, Railway, Insurance, Dock, Hotel, and other Companies. FEBRUARY NUMBER (now ready) contains the particulars of a WELSH LEAD MINE lately introduced to the public, and which will soon be worked, without exception, THE RICHEST MINE IN WALES. Shares, which can now be purchased at £2 10s., will very soon be worth at least £20. INVESTORS' GUIDE, published monthly, and forwarded POST FREE on application to—

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Reports on any mine in the two counties, and every kind of legitimate mining business transacted. C. PENGILLY, Secretary.

LEAD ORES.				
Date.	Mines.	Tons.	Price per ton.	Purchasers.
Feb. 17—Powell United	15	15	£11 12 6	Runcorn Company.
— ditto	15	15	11 12 6	Walker, Parker, & Co.
22—Minera Union	30	30	12 1 6	Adam Eytton.

BLACK TIN.				
Date.	Mine.	Tons.	Price p. lb.	Amount.
Feb. 17—Wheal Uney	12	4	£79 5 10	£2 970 8 6
21—Great Wh. Vor	20	2	3 25	1626 15 0

COPPER ORES.

Sampled Feb. 8, and sold at the Royal Hotel, Truro, Feb. 23.

Devon Great Consols	124	£3 0 0	Phoenix	86	£25 3 6
ditto	115	4 12 0	ditto	84	3 2 6
ditto	101	2 9 0	ditto	60	5 2 6
ditto	100	2 9 0	ditto	66	6 3 6
ditto	98	1 1 0	Gunnislake (Clitters)	65	4 10 0
ditto	97	2 0 6	ditto	61	5 10 0
ditto	88	5 0 0	ditto	67	4 15 0
ditto	76	2 19 6	ditto	47	2 13 0
ditto	74	1 2 0	Glasgow Caradon	94	3 17 0
ditto	70	5 0 0	ditto	74	5 0 0
ditto	65	3 8 6	ditto	68	3 19 6
ditto	62	1 0 6	East Caradon	87	4 16 0
ditto	61	3 2 6	ditto	68	4 10 0
ditto	67	3 6 6	ditto	46	2 1 6
ditto	47	5 7 0	Wheal Russell	86	3 12 0
ditto	43	5 3 6	ditto	67	7 4 0
ditto	39	0 17 6	Gawton	54	3 3 0
ditto	32	2 12 0	ditto	50	1 17 6
ditto	30	5 5 0	ditto	25	1 3 0
ditto	10	30 5 0	ditto	21	6 13 0
ditto	9	30 10 0	Bedford United	70	3 8 6
Marke Valley	100	3 11 6	ditto	60	3 0 0
ditto	94	3 13 0	New Pembroke	45	6 16 6
ditto	74	5 2 6	ditto	25	6 16 6
ditto	65	5 10 6	ditto	25	2 4 6
ditto	60	4 3 6	Kelly Bray	70	2 6 6
ditto	50	1 11 6	ditto	40	3 10 0
ditto	49	3 3 0	Craddock Moor	67	3 17 0
ditto	30	1 7 6	ditto	44	6 8 0
South Caradon	70	5 0 6	Wheal Crebor	48	3 1 6
ditto	61	5 12 6	ditto	38	2 11 0
ditto	60	4 15 0	Gonamen	30	2 9 6
ditto	56	4 12 6	ditto	22	6 2 6
ditto	53	9 0 6	ditto	20	1 12 0
ditto	52	7 5 6	Prince of Wales	60	4 6 6
ditto	50	5 9 0	West Caradon	48	3 14 6
ditto	47	5 14 0	Franco Consols	35	1 13 6
ditto	40	4 0 6	Trefry's Regulus	27	11 8 6
ditto	33	9 1 0	ditto	5	23 1 0

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Notices to Correspondents.

NANGILES MINE.—I see a little error in your account of our meeting, which was held in London on Feb. 15th. In speaking of the stamping machinery we bought from the Welsh Gold Mining Company, I am made to say that it cost 1250*l*. to bring it to Cornwall; it should be 50*l*., and its value here 1250*l*.. In speaking of Wheal Jane Mine, I am made to say if they had not erected a large steam-stamp they would be losing 5*l*. a month; it should have been 500*l*. a quarter. I shall feel obliged if you would correct this, as I should not like for our shareholders to think that our machinery cost so much to bring it to Cornwall.—JAMES ROWE.

NUMBER OF SHARES.—Your correspondent, "An Old Subscriber," has fallen into a double error. The Van Mine has 15,000 shares (not 12,000), and Van Consoils is in 12,000.—ANOTHER SUBSCRIBER.

CAPE COPPER MINING COMPANY.—As a holder of 100 shares in this company, will you permit me through the medium of your columns to enquire how it is that, notwithstanding the magnificent reports received from the mines, and the continuous large sales of copper ores, the directors had not declared a dividend since February last?—W.

STREATHLE.—A letter, in reply to the enquiry of "H. G." (Waltham), appeared in the Supplement to the Journal of Jan. 28.

WEST TOLGUS.—Can any of your readers inform me in the columns of your interesting Journal the reason that shareholders are not kept apprised of the position and prospects of their property? If our affairs are not progressing so satisfactorily as could be desired, what possible reason can the managers have for withholding the facts from those who have an undoubted right to be possessed of all information, whether it be favourable or otherwise? As a shareholder, I hear that a very serious misfortune has happened at the mine, in consequence of an alteration of pump-rods, &c., in the shaft.—I would not improperly condemn any or either of the agents, but when I hear this calamity has befallen the mine through the proposition of two captains, and in opposition to most others concerned, I consider this a mistake which the adventurers ought not to easily look over. I do hope they will thoroughly investigate the affair, and receive each agent's statements before the meeting, which will take place in a few days.—C. E.

Received.—Verax—Worcester—An Old Shareholder—J. H.—P. Halliday—W. R. Mine Agent—N. E.—Amalgamation—H. M.

THE MINING JOURNAL, Railway and Commercial Gazette.

LONDON, FEBRUARY 25, 1871.

MINES REGULATION AND INSPECTION.

The "Mines Regulation Bill, 1871," was read a second time on Thursday evening, so that its principle may be regarded as finally accepted by the House of Commons, although certain alterations in detail may probably be made in Committee. The whole measure appears to be as fair and impartial as can reasonably be desired by either masters or workmen, and whether these be engaged in coal or metalliferous mining. The opinion of honourable members who are dependent for their knowledge of mining upon such isolated facts as they can glean from others should exercise but little influence; in the debate on Thursday, however, the views of such men as Mr. FOTHERGILL, Mr. DILLWYN, Mr. GEORGE ELLIOT, Mr. BROGDEN, Mr. HARDY, and Mr. BRUCE having been elicited, and these views having been favourable to the measure, except in minute details, there is no room to doubt the thoroughly practical and useful character of the Bill. This seems to be quite the feeling of Mr. ELLIOT, and since from his having commenced life as a pit-boy, and gradually raised himself to a position as high in connection with colliery operations as GEORGE STEPHENSON ever attained in civil engineering, he must be intimately acquainted with every requirement of the case, the weight of his opinion is unquestionable. He considers that—

"The clauses of the Bill dealing with the safety of the miners could not be much improved, as they showed that the framers of the measure were acquainted with mining affairs to the utmost minutiae of detail. Upon the question at what age children should be permitted to be employed in mines, he thought the matter

might be left to the discretion of the Home Secretary where the mine owners and parents were agreed, because, whereas in some districts it would be no right to permit children under 12 years of age to descend the mines, in others no harm would result from permitting children of 10 years of age to be so employed. With reference to the penal clause, he thought a fine should be adopted as the punishment for breaches of rule before imprisonment was resorted to. No one took more interest in the welfare of the miners than he did, but he feared that too much inspection would tend to decrease the responsibility of colliery owners and managers, and so, in reality, increase the danger to the lives of the persons employed. At the same time, he felt that the general tendency of the Bill would be to effect good, and, therefore, he hoped it would be allowed to go into Committee."

With regard to the employment of children, Mr. HARDY made the very pertinent observation that he did not see why children should not be allowed to labour in mines, where, as a rule, they would be engaged in work with their own fathers, under the same or similar half-time regulations that obtained in factories. If this were not so the colliery owners in certain districts would have a right to complain that a law was being meted out to them different from that under which manufacturers conducted their business. With respect to another branch of the subject, he felt sure that a system of minute inspection (such as was suggested by Mr. SAMUELSON) would result in enormous expenditure, with but small corresponding benefit, and would at the same time afford little or no additional protection to the workmen, because it would decrease the responsibility of colliery owners and managers. He felt confidence in the course proposed by Mr. BRUCE, because in his opinion the measure hit the mean between rendering managers almost entirely irresponsible through excess of Government inspection, and allowing them to conduct their business in a reckless manner, because the Government inspection was either insufficient or inefficient. These views so precisely accord with our own, that we trust the Bill will be made law without any material alteration from what it is at present, and we feel sure that, after mature deliberation, all interested will admit that they are thoroughly satisfied.

CO-PARTNERSHIPS IN THE COAL AND IRON TRADES.

The direction which has marked the tendency of domestic legislation in this country in modern times demonstrates the current of the public sentiment in matters in which labour and capital are employed upon a large scale are especially concerned. Boards of Arbitration and Conciliation are not, however, the ultimate good to which the wage-earning classes are looking. It is not desirable that these people should have no higher aim, and it is clear that Mr. KETTLE, and the thinkers and workers on this subject with whom he is associated, are right when they lay it down that the present relation of capitalists and operatives is not destined to perpetuity; that a transition has begun of which the end at present is not clearly seen.

It is with much satisfaction we note the continued success of the attempts to practically solve the problem before us which is being made by the firms in whose proceedings the readers of the Journal may be expected to take especial interest. Of these latter no one, we presume, is ignorant of what is being done in the direction indicated by Messrs. BRIGGS and Co. (Limited) at their collieries, and by Messrs. FOX, HEAD, and Co., at their ironworks at Middlesbrough. We have been gratified from time to time to draw attention to the action of these two firms in their dealings with their workpeople. When Mr. BRIGGS last publicly referred to the method which he has adopted for making his people share with him in the result of greater prudence and care on their part whilst pursuing their avocation, he stated that, supposing that the wages which were being paid to the men who were associated with the Northern Board of Arbitration should at the same time be received by his men, then that they might in all probability look for a bonus at the end of the year of some 4 per cent. That expectation had been realised.

On Saturday the firm met their workmen, their wives, and families in the Odd Fellows' Hall, Middlesbrough, for the purpose of informing them how the co-partnership scheme had fared during the past 12 months at the Newport Rolling-Mills. Messrs. FOX, HEAD, and NEWCOMEN, the members of the firm, were present, and so, too, were Mr. JONES, the manager, Mr. HUTCHINSON, the cashier, and Mr. WATERHOUSE, of the firm of BRICE, HOLLAND, and WATERHOUSE, the public accountants, of London. The appearance of the hall when these gentlemen entered and took their seats upon the platform is described to us as cheering in an eminent degree. The place was thronged by people happy in the knowledge that they were about to participate in what was all that it professed to be when it was called by the name of a bonus. A bonus it was upon their wages, and they were prepared to receive it as such, and to bless the hand that gave it. Not as those who obtain an eleemosynary gift, but as those who receive practical recognition of the view of their employers—that if by prudence and care the workmen can aid to an extent not previously observed under the simple wage-paying system, in the economical carrying on of the joint concern, then that they may confidently look for their share of the resultant saving. Under these circumstances, it was no wonder that when Mr. THEODORE FOX, the senior partner of the firm, addressed them in a genial speech from the chair, his remarks should have been received with hearty appreciation. Nor was it otherwise than what might have been expected that when Mr. JEREMIAH HEAD enlarged upon the mutual benefit of the co-operative principle, which they were that night celebrating, the people should have had their faith confirmed in the wisdom of the arrangement which had brought them together. The best, however, was yet to come. The official statement of the financial results of the operations at the Newport Mills was to be laid bare. This was done by Mr. WATERHOUSE, who read the report. It showed that his examination of the books of the firm justified the payment to the workpeople of 4 per cent. on the wages received by them during the year. Nor were the results confined to those whose earnings are usually termed wages; those employees who are paid in a manner which is euphoniously described as by salaries participated with the rest in the outcome.

Whilst this firm is alone in Middlesbrough in what they are doing, they are confident that after their method has been in operation a few years it will be widely imitated. They point out that under this system of co-partnership, without the relative position of master and man being interfered with, no need exists for a Board of Arbitration. Mr. HEAD holds that the contract with their men is, in fact, arbitration before hand, because the firm drew up a programme which the men accept, and because it provides fully for good times and bad times—for anything that may arise—there is no more fear of disputes arising than after an act of arbitration. Nor does Mr. HEAD believe that if co-partnerships should become universal they will not succeed. Wages, he maintains, would in that case not vary at all, and therefore, they would need no general combination to settle rates. We should be sorry to see arbitration abandoned without its place being occupied by something better, but we are inclined to look to co-partnerships as being that something better which will succeed arbitration, even as in the degrees of comparison better is followed by good, to be itself succeeded by best. Working men will, by-and-by, find in it something better than Unionism. Messrs. FOX, HEAD, and Co. began by saying to their men, "Now, what we must do is to establish a firm union between you and us. You must, therefore, first cease to have a firm union with anyone else." The firm did not believe in the faithful service of the men to them if at the same time they should be faithful to their Unionist leaders. And what the firm asked their men to do they themselves did on their part.

We concur with Mr. HEAD in thinking that his system will shortly receive very much more attention than it has at present secured. Our own knowledge of what is going on in the iron-making districts leads us to express this opinion with much confidence. Already we know of one firm who are large employers of labour, alike in the mine, at the blast-furnace, and in the mill and forge, who have determined to adopt it as quickly as the requisite arrangements can be made. They will, however, proceed cautiously. There is, no doubt, greater difficulties attending its adoption where a firm gets much of its own materials than where most is purchased. In the last cases prices can be assessed without any difficulty, and valuations made with certainty; but to adjust profits, and thereby to arrange the bonus which is to be paid to the workpeople, is not so easy in the other case. The difficulties will be attempted to be met by the principle being first made to operate in connection with the superior employees. It is, no doubt, right that a man who receives stated wages should give as much attention to the concerns of those from whom those wages are received

as he would to his own concerns. Human nature, however, is human nature, and though a man may be paid not for mere muscular labour alone, but likewise for services in which mind is in more request than muscle, yet, when he knows that he shall receive as much year by year for his services when his department may be more than necessarily costly as he would receive if in that department he should exercise unwonted vigilance, with a view to its economical management, he will not, to say the least, distress himself. To such men, in the great concern to which we are now referring, it will by-and-by be said in substance, "Now, your department as at present managed costs so and so; you have the control of it, and can make it less expensive if you so determine. Henceforth what you make it less costly than now shall form the basis of a division between you and us of a sum equal to the money saved. The proportion to be adjusted in the manner following." This is beginning tenderly, but it is beginning in the right direction, and we hail it with much gratification. We are sure that the difficulty with which this firm thus surround the question will disappear the more resolutely it is looked at; and we are quite certain that many other firms could more readily embrace the co-partnership principle in all its entirety, as carried on by Messrs. FOX, HEAD, and Co., than this particular firm can in only the partial degree that we have sketched. Mr. HEAD is not far wrong when he looks upon the co-partnership system as one feature of the great liberal principles in which the people of this country have some faith. He believes in these people, even as wage earners relieving their employers from anxiety, and raising profits to a maximum; even as he is quite aware that they are able to obstruct and in many ways render profit impossible. He is anxious to put the working classes in a position in which they should be trusted, and he believes that English workmen, perfectly understood, properly treated, and labouring on principles that are economically sound, will reciprocate good feeling, and behave themselves like sensible men.

EFFECTS OF COLD UPON IRON.—The apparent undecisiveness of the experiments for ascertaining the effects of cold upon iron recently brought before the Manchester Literary and Philosophical Society, induced Mr. P. SPENCE to undertake a further series. He limited himself to ascertaining whether the reduction of temperature has any, and if so what, effect on cast-iron with regard to its powers of resisting transverse strain either of weight or pressure. As experiments made with iron of special quality are quite worthless for all practical purposes, Mr. SPENCE was careful to obtain such as might be considered as generally obtainable in the market. Messrs. RYE, SON, and OGDEN, of Newton Heath, carefully made 50 cast-iron bars 3 feet long x half an inch square, all out of one ladle, and of No. 3 Gleggarnock pig, and Kirkless Hall common pig. Mr. SPENCE cut each bar into three lengths of 1 ft., the 150 pieces being thrown together in a heap; the ends were then covered with paint, that the new fracture might be examined; and the heap was then taken into his laboratory, so that it had three chances of perfect mixing. A boy 11 years old now handed him the pieces singly from the heap, and he placed them alternately one by one in two lots, until he had got 70 pieces in each lot. One lot was placed in a freezing mixture, standing at zero, for nearly 48 hours, and the other lot was put into water at 70° Fahr., chiefly that the pieces might be broken wet, as those would necessarily be when taken out of the freezing mixture. The distance between the supports was exactly 9 in. in every case; and Mr. SPENCE'S experiments prove that "cast-iron having at 70° Fahr. a given power of resistance to transverse strain will on its temperature being reduced to zero have that power increased by 3 per cent." At the temperature of 70° Fahr. the maximum breaking weight was 4 cwt. 3 qrs. 26 lbs., and the minimum 2 cwt. 2 qrs. 14 lbs., equal to an average of 3 cwt. 3 qrs. 6 lbs. At zero the maximum breaking weight was 4 cwt. 3 qrs. 13 lbs., and the minimum 2 cwt. 3 qrs. 10 lbs., equal to an average of 3 cwt. 3 qrs. 11 lbs. The difference, therefore, is but 5 lbs., or less than 12 per cent., increase by the reduction of temperature. Adding together, however, the breaking weights of the 70 samples tested at 70° Fahr., the total is 268 cwt. 3 qrs. 18 lbs., equal to an average of 3 cwt. 3 qrs. 10½ lbs. The total breaking weight of the 70 samples tested at zero was 276 cwt. 3 qrs., equal to an average of 3 cwt. 3 qrs. 22½ lbs. The difference thus shown is 12½ lbs., or about 3 per cent., increase, as Mr. SPENCE states.

WROUGHT-IRON RAILWAY SLEEPERS.—Mr. RICHARD GAMMON, of Westbury, has patented a new railway sleeper, which is likely to supersede the whole of those at present in use, especially in tropical countries. The constructors of our railways in India experience the greatest difficulties in making and maintaining the permanent-way. The dry-rot, and those pests of India—the white ants—destroy everything. Sleepers sent from England creosoted and "pickled" are not protected from the influence of the sun and vermin, and seldom or never last more than three years. It was necessary, therefore, to find a substitute, something not only impervious to the attacks of the insects, but which might be made in this country perfect and ready to be laid down wherever they should be required. Mr. GAMMON'S sleeper is made up of a number of webs and plates of rolled iron, riveted together, and pierced with bolt-holes for the chairs. This saves about two-thirds of the labour in laying, and leaves but little work to be done by native or other labour. The direct cost is not more than 1s. each above that of the best wooden sleepers, and they are calculated to last ten times as long in tropical countries, and three times as long in Europe. Many eminent engineers and railway contractors, who have examined them, believe they will be the railway sleepers of the future. At all events, the invention is highly ingenious, and likely to supply a great want.

TELEGRAPH SIGNALLING IN COLLIERIES.—The advantages of being able to communicate from one part of a colliery to another, especially where the workings are very extensive, are of more than ordinary importance, and it appears that such can now be done at a trifling cost. Mr. R. MILLER, of the Stratford Main Colliery, near Barnsley, has just applied the system at that place, and found it to work admirably. The apparatus consists simply of an ordinary galvanic battery, with the usual preparations of copper, zinc, &c. From the two sides (positive and negative) of the battery two copper wires are taken, one through a system of bells, which act as signals, and both alongside of the engine-plane. The principal merit and advantages are that so long as those wires are simply together on the road the electric current is not completed, and no action takes place in connection with the signals; but should anything occur whilst a train of "corks" is running the boy who rides on it has only to grasp the two wires together in his fingers to make the circuit, and to give the signal to instantaneously "stop," and then when all is right to "go on" again, as may be required. By means of the apparatus and wires; also, a system of messages can be transmitted from one end of the pit to another, so that the manager or others can be saved long journeys in making enquiries. Such can be done at little cost in the first instance, whilst the keeping of the whole in a good and efficient condition can be done for a mere nominal sum. By such simple means accidents in pit bottoms would, no doubt, often be prevented, and when they did occur would be immediately known in every part, and all danger from them anticipated and obviated. We have every reason to believe that the system will commend itself to colliery managers, and that its adoption will come into general operation.

BESSEMER AND CRUCIBLE STEEL CASTINGS FOR GUN BARRELS, &c.—The great demand since the commencement of the war on the Continent for rifles has led to the adaptation by Mr. FOSTER, of Sheffield, of a patent by means of which barrels can be cast from a hollow bloom. They are cast with a chill centre, and then rolled into the centre instead of being drilled, and so preserving the original skin of the metal, and maintaining its strength of a uniform character. By being case-hardened they wear longer without fouling, are not liable to corrosion, whilst the cost is scarcely so much as the ordinary barrel. Mr. FOSTER has just had a Chassepot barrel cast, and it appeared to be all that could be desired. The invention is applicable to steel hoops for railway wheels, gun barrels, and the casting of cylindrical forms in Bessemer or crucible steel. The object of the improvement is to save the preliminary processes in the production of a "bloom" by casting it in a metal mould, with a movable metal pin centre, or core and cover, by which means a bloom is produced, and when re-heated is ready to be rolled and finished without requiring to be cut, hammered, or shaped, strength to the article so produced. In carrying the improvement into practice a metal mould (by preference of cast-iron) is arranged in combination with a movable centre pin or core, and a cover or lid, which is also movable. The centre pin or core, with the lid or cover, are held in position by a collar, or otherwise in such a manner that the cover can be eased to make directly after the melted metal is run into the mould, the centre pin or core being then forced out, either upwards or downwards, as may be found most convenient, thus leaving the steel to contract uniformly throughout. The interior capacity of the mould is suited to receive the exact quantity of steel required for the production of a "bloom."

for a hoop, tyre, or other article of given weight and dimensions. The metal centre or core may be made either solid or hollow. In like manner cylindrical forms may be made of cast-steel suitable for other purposes. Mr. FOSTER is at present in treaty for the production of a large number weekly of gun-barrels, and the invention is likely to turn out a very valuable one, and also effect a great improvement in the production of barrels of every description.

ANALYSES OF CORNISH ROCKS.

A valuable and interesting paper on the Chemical Composition and Microscopic Constitution of Certain Cornish Rocks has been communicated to the "Philosophical Magazine," by Mr. J. A. PHILLIPS, F.G.S. Both the slates and granites of Cornwall are traversed by numerous dykes of granitic and porphyritic rock, called elvans, by occasional trap-dykes, by numerous copper and tin lodes, and by various cross-courses and flookans, the latter being fissures filled with clay. This formation is characteristic not only of the whole of Cornwall, but also of a large portion of Devonshire. Masses of serpentine occur in various localities in this district, particularly in the south-western portion of Cornwall, in the vicinity of the Lizard Point. The object of Mr. PHILLIPS's paper is to give the results of a series of careful analyses and of numerous microscopic examinations, as a small instalment of that mass of exact information so necessary to a more accurate knowledge of the petrology of one of our most important mining districts.

The constitution of killas varies so greatly that the analyses could scarcely be recognised as referring to the same material and depth, as depth appears from the figures given to have no determinate influence in changing the characteristics of the killas. Thus the killas of Polgoth Mine, taken from the adit level, the 80 fm. level, and the 100 fm. level respectively, gave the following results:—

	Adit.	80 fathom.	100 fathom.
Specific gravity	2.60	2.74	2.73
Water	4.16—4.00	3.65—3.60	3.53—3.20
Silica	60.45—60.39	63.00—63.20	61.00—59.83
Titanic acid	21—21	Trace.	Trace.
Phosphoric acid	20.67—21.00	20.50—19.80	20.67—20.90
Alumina	8.21—8.13	3.56—3.46	13.44—13.39
Ferric oxide	1.91—1.87	3.10—2.83	4.70—5.14
Ferrous oxide	4.33—3.39	Trace.	Trace.
Manganoso-manganic oxide	1.86—1.66	1.35—1.20	1.68—1.66
Oxide of manganese	Trace.	Trace.	Trace.
Lime	74—80	95—95	95—91
Magnesia	1.56—1.54	3.07—3.22	3.96—4.20
Potassa			
Soda			
Total	100.20—99.89	99.19—98.26	99.73—100.13

The only other mine from which Mr. Phillips has analysed ore from two levels is that of Botallack. The subjoined are the results:—

	Near surface.	130 fathoms.
Specific gravity	2.95	2.82
Water	3.12—3.13	11.06—11.12
Silica	40.27—40.16	32.99—33.03
Titanic acid	15—15	Trace.
Phosphoric acid	66—66	Trace.
Alumina	24.03—23.99	16.69—16.77
Ferric oxide	4.25—4.16	7.17—6.88
Ferrous oxide	11.31—11.29	13.67—13.75
Sulphur	Trace.	Trace.
Lime	4.16—4.05	5.02—4.78
Magnesia	6.46—6.28	11.43—11.61
Potassa	1.65—1.68	78—68
Soda	3.54—3.60	64—61
Total	99.05—99.36	99.39—99.23

Now, if the figures here given be compared with those given for the Lizard serpentine it will appear that there is no justification for the inference drawn from Mr. PHILLIPS's paper that killas changes into serpentine in depth, nor that it is, principally, the proportion of magnesia that changes a rock from a killas to a serpentine, but rather that it is the decrease in the percentage of alumina that exercises the influence, the analysis of the serpentine showing—water, 15.52; silica, 38.58; alumina, 3.06; ferric oxide, 1.95; ferrous oxide, 5.10; oxide of manganese, trace; protoxide of nickel, .30; sesquioxide of chromium, .08; magnesia, 34.32; potassa, .30; soda, .76.

It would appear, then, to be the presence of alumina, potassa, and soda that keeps the killas distinct from the serpentine. The whole subject, however, might be very profitably discussed by those engaged in working mines.

REPORT FROM SCOTLAND.

Feb. 22.—The impulse which was given to the price of Pig-Iron last week weakened at its close, but the opening this week was characterised by an improvement, and yesterday the market closed at 52s. 3d. prompt, and 52s. 6d. one month, or 4½d. a ton on Friday's quotations. The masters have advanced their prices under this impulse, and if local melters were at work, and peace were restored to Europe, the market would then take a decided advance. The make of 127 furnaces which are now in blast is considerably in excess of present demand; but with ports opened, the local strike amongst the malleable workers brought to a close, and peace amongst the nations, the consumption of iron would go on uninterruptedly for years to come. The shipments of pig-iron for the week just ended are short of those of the corresponding week last year, being only 7787 tons, against 9571 tons in the same week of 1870; but this week, out of the 19 ports of shipment, only 10 return shipments, nine having shipped nothing. The market was steady to-day—52s. 2d. cash, 52s. 3d. eight days, and 52s. 6d. and 52s. 5½d. one month was paid for several thousand tons, closing buyers at lowest figures, sellers requiring 1d. per ton more. No. 1, g.m.b., 52s. 9d.; No. 3, 52s. Makers' iron, No. 1—Coltness, 62s.; Gartsherrie, 61s.; Calder, 59s. 6d.; Shotts, 58s. 6d.; Langloan, 56s.; Eglinton (at Ardrossan), 53s. 6d.

Some of the malleable ironworks having partially resumed work both in this and the Coalbridge districts, these works are as busy as they can be, and are open to engage additional hands. Prices are now being quoted for first common bars, 8½; second ditto, 7½; plates (ship), 8½; 2d. 6d., to 9½; boiler ditto, 9½ to 16½; for extra; rails, 7½ to 8½. The exports of manufactured iron for the week amount to 75 tons of various kinds; galvanised, 79½ tons; chains, to 22½; value; cast manufactures, to 4108½; or 11 tons; and cast pipes, to 1007½; value. The orders for finished iron which are held back on account of the strike are numerous; and as the Clyde builders are busy with vessels of large tonnage, there will be great demand for ship iron during the year.

With regard to the ironworkers' strike, the majority of the men still hold out, the works in operation being as yet supplied by non-Union men. At a mass meeting of workers held in Motherwell, on Saturday, at which the Glasgow, Coatbridge, Mossend, and Motherwell districts were represented, the following resolution was passed unanimously:—"That we, the puddlers of Scotland, agree to offer to our employers to resume work on the following terms. We depart from the 6d. per ton awarded by Mr. Anderson, and submit to Mr. Hughes' award in the North of England, the millmen resuming work at the old average wages, the wages for nobbling to be 9s. per ton, and for doubling 10s. per ton." In accordance with this resolution, the masters have been consulted, but they decline to accept of the terms, and a continuance of the struggle is expected. A division of money took place on Saturday amongst those on strike, but the sum being small, we would urge, in the language of Mr. Kane, their secretary, that there is a "necessity of again endeavouring to come to terms with the employers, as mild measures, in the present state of the trade, were the best in the meantime."

A small but compact malleable ironworks has been set in motion at Holytown. It is named the Clydesdale Iron Company's Works, and is owned by Bain, McKinnell, and Co. It has 10 puddling-furnaces, constructed on the Gorman principle; the hammer is of 40-cwt. power; and they have a heavy plate-mill and rolling-mills, with shearing-machine, and scrap-cutters, &c. Attached are houses for the workmen. The whole machinery and appliances embrace the newest improvements.

The Shipping Coal Trade is very active, both foreign and coastwise, the opening of the Northern ports increasing the demand. During the week there were sent seaward 14,284 tons foreign, and 17,989 tons coastwise—32,273 tons, against 19,064 tons in the corresponding week of last year. This makes the shipments of the month amount to 118,437 tons, against 92,812 tons in the same month of 1870.

The Clyde shipbuilders had, perhaps, never so many large vessels on the stocks at one time as they have just now, and are still adding. On Monday there was launched a large screw-steamer for the Peninsular and Oriental Company, of 3400 tons, and 450-horse power. She is named the Indus. On Tuesday the General Steam Navigation Company had launched, for their trade between Bristol and Ireland, a handsome screw-steamer of 1200 tons, and 210-horse power. The vessel is named the Argo, and has first-class accommodation for 60 passengers. There was also launched an iron screw hopper-barge, of 220 tons builders' measurement, fitted with engines of 30-horse power. This

craft is of somewhat novel construction, and is to be employed for making breakwaters, and works of that nature, as well as for the ordinary purposes of a hopper-barge. She has been built for Barrow-in-Furness, at which rising port extensive improvements are at present in progress, under the direction of Messrs. McClean and Stilleman, C.E. A duplicate steam hopper-barge, and two powerful steam screw-dredgers, are in hands at present for the same destination.

REPORT FROM THE NORTH OF ENGLAND.

Middlesbrough, Feb. 23.—There is generally a better feeling in the Iron Trade this week. Enquiry for nearly all classes of iron is slightly improved, and prices may be regarded as being rather firmer. Tuesday's market at Middlesbrough was well attended. The amount of business actually closed was, however, not large; for pig-iron quotations were stiffer, and are now more uniform. This week's rates are the same as those quoted on 'Change last market day—46s. 6d. to 47s. for No. 3; and 50s. 6d. is firmly asked for No. 1, net cash, on trucks at makers' works. Deliveries are generally steady; and by water they will be largely increased as soon as the continental ports now blocked up are opened. A considerable quantity of iron is awaiting opportunity to be shipped thither. The finished iron market is somewhat better. Most plate-makers are in a pretty fair position for orders, and are now able to get rather higher prices than prevailed a few weeks ago. For rails there are a few enquiries being made, but there is not an average demand for this class of manufacture. For Russia the demand is slow, but if the political difficulty having regard to that country be disposed of satisfactorily, and a definite arrangement of affairs on the Continent is made, an important change for the better is certain to take place in this department of the iron trade. A small order or two for rails are said to have lately been received in the Cleveland district. Shipbuilding is active, and orders are in the hands of some firms to give full employment for a considerable time. Marine engine-builders are well employed, and for general engineering requirements there is a large quantity of work on hand.

The new works in the neighbourhood of Middlesbrough are making rapid progress towards completion. The Imperial Ironworks, the property of Messrs. Jackson, Gill, and Co., at Eston, are so far finished as to enable a commencement to be made with the manufacture of puddled bars on Monday, the 5th proximo; there are 22 puddling furnaces at these new works. The Britannia Ironworks are also beginning to show signs of completion in many of their departments; the manufacture of puddled bars will be commenced at these works within a month from the present time. These works will be of large capability when finished. There are at the present time 120 puddling furnaces "down."

On Saturday afternoon the principals of the firm of Fox, Head, and Co., of the Newport Co-operative Rolling Mills, Middlesbrough, met their employees, with their wives and families, in the Odd Fellows' Hall, Middlesbrough, to give an account of the working of the co-operative scheme throughout another year. Mr. Theodore Fox (who presided), Mr. Head, and Mr. Newcomen addressed the meeting. Mr. Waterhouse, of the firm of Brierley, Holyland, and Waterhouse, public accountants, of London, then addressed the meeting, and made the declaration in the following terms:—"We hereby certify that we have examined the accounts of Messrs. Fox, Head, and Co. for the year ending Dec. 31, 1870. The books show that results of the manufacture for the past year justify a division under Clause 12 of the co-operation scheme of a sum which will admit of a bonus to the employed of 4 per cent. on the wages and salaries received by them during the year."

The annual dinner of the ironmasters and iron manufacturers was held on Tuesday, at the Zealand Hotel, Saltburn-by-the-Sea. Mr. William Whitwell is elected President of the Manufacturers' Association for this year.

It is rumoured that Mr. C. F. H. Bolekow, and another gentleman whose name we have not heard, are to be the managing directors of a new blast-furnace company, to be called the Marton Iron Company.

REPORT FROM MONMOUTH AND SOUTH WALES.

Feb. 23.—The Iron Trade continues quiet, but prospects are brightening as the establishment of peace becomes more certain; for, once it is clearly known that the conflict will not be renewed, the long-expected improvement in the demand will begin to take place, and a higher scale of prices may be commanded. As was remarked in last week's report, the present obtainable rates are far too low to induce makers to accept anything like long engagements, were such placed in the markets. There is, perhaps, a little more activity at the works, and the make in most departments has somewhat increased, although there are not many new contracts in hand. In anticipation of an early demand for large quantities of railway iron for Russia, the rail mills are kept in pretty regular employ, and considerable stocks of rails are sent down to the local ports to be ready for shipment. The Baltic shipping season will shortly open, and there is reason to believe that the clearances of railway material will be extensive. From the United States specifications come regularly to hand, but advices from New York are not latterly so favourable as might be desired. On account of the colonies there is still something doing, but not much. The home railway companies are said to be entering the markets with a little more freedom. The continued wear and tear renders it absolute that renewals must at least be attended to, and that further delay would be disadvantageous. There is a pretty good enquiry for bars and some other descriptions of make. Pig also commands a good sale, and the make continues large. There is scarcely any new feature in the Tin-Plate Trade.

There is now little doubt that the proposed reduction of wages, referred to in previous reports, will have to be carried out by the ironmasters. The men have been labouring under the impression that a reduction is not really a necessary step as arising out of the present position of the trade, and they refer to the dividends declared by some of the iron companies as a proof that their employers are reaping a handsome return upon their capital. They, however, forget that the dividends in question—for instance, those of the Blaenavon, Rhymney, Ebbw Vale, and other companies—were up to Sept. 30, a period which included some of the best contracts obtained in this district for many years past. Since then orders have had to be taken at a reduction, which commenced at 10s. per ton, and which has now reached from 25s. to 30s. per ton, as compared with the quotations which were obtainable about this time last year. Hence it is clear that the masters are not only justified, but in order to obtain anything like a profit upon their manufacture they will be compelled to enforce a reduction, averaging 10 per cent.

A better feeling is evinced in the Steam Coal Trade as the prospects of peace brighten, but the trade is far from being in a satisfactory state. Considerable clearances have been made during the week to France, and the usual shipments have been made to the West Indies, the Indian stations, South America, and the Adriatic ports. The future prosperity of the trade undoubtedly greatly depends upon the cessation of the war, for without France as a customer there will of necessity be a large degree of depression. In the House Coal Trade business is a little quieter, the season having now arrived when the consumption of house coal is beginning to fall off.

As some proof, however, of the expectations that are entertained in the district it may be stated that preparations are being made to recommence operations at several collieries which have been at a stand-still for a considerable time past. The proprietors of the Gnoil Colliery near Neath, have agreed to re-construct the necessary machinery for the carrying on of operations, which will be re-commenced with the least possible delay. Operations are also being resumed at the Raglan Colliery, Briton Ferry.

We are pleased to hear that the Lydbrook Tin-Plate Works, near Ross, in the Forest of Dean, has been taken by Mr. Richard Thomas, late manager of the Ynyspenllwch Tin-Plate Works, Swansea Valley. We cordially wish him success in his new undertaking.

Undoubtedly a great boon to the district will be the transformation of the Great Western line of railway from broad to narrow gauge. The directors have announced their intention to bring the matter before the next general meeting of the company, and it is to be hoped that the project will be carried out as soon as possible. The coal traffic which has been lost to the line for want of a narrow gauge has unquestionably been great, and the loss which coal-owners have sustained through not having their coals cheaply conveyed to the metropolis is perhaps greater. It is, however, believed that necessity will be so impressed upon the company, that no time will be lost in laying down the narrow gauge line, which can be done without much interference to the traffic.

A sad and fatal accident occurred this week at the Genip pit, at Aberdare. A gentleman named William Veal, of Penford, near Bristol, while on a visit in the district, expressed a wish to go down into one of the collieries, and permission was given by Mr. Davies, of the Gadiya Works, that he should go down the Genip pit. He was accompanied by the engineer of the works and some other persons. On arriving at the bottom of the pit the engineer suspected the carriage to get a light, and requested the others to remain on the carriage until he returned. Before he returned, however, the carriage began to

ascend, and in jumping off Mr. Veal fell into the sump, where there was about 7 ft. of water, and was drowned. It was distinctly stated that no signal was given for the raising of the carriage. There were, however, other landing places, and no means of communication existed between one and the other. At the inquest which was held on the body, the jury remarked upon the want of efficient and distinct means of communication from one level to another, and the jury recommended the establishment of such means.

The dividend of the Myndy Iron Ore Company (Limited) for the past half-year is 4s. per share of 31. 10s. paid, which is about 5½ per cent. for the year. The profits of the company were, however, sufficient to pay another 2s. per share, only that part of it was paid in the reduction of the mortgage. They are making extensive trials in search of further deposits of iron ore.

In the Rolls Court the Gloucester Wagon Company applied for leave to seize a large number of wagons in the possession of the Hirwaun Iron and Coal Company, whose affairs are being wound-up. It was alleged that the value of the wagons was 21,000l., of which the Hirwaun Company had paid 8000l., the condition being that the wagons should be placed in their hands for use, and become their absolute property. If the full amount was paid within a given period. The Hirwaun Company were prepared to relinquish possession of the wagons if the Gloucester Company would release them from all claims for arrears of purchase-money, all liability in connection with the wagons, and the judgment which had been obtained for arrears of rent. On behalf of the Gloucester Company it was stated that nothing less than possession of the wagons would be satisfactory to them. The Chief Clerk blamed the companies for not settling the dispute, and reserved his judgment to give them an opportunity for doing so.

The arrivals at Swansea include—the Mariette, from Bordeaux, with 178 tons of pitwood, for James Davies; Francis II., from Bilbao, with 250 tons of iron ore, for James Strick; John Pickard, from Lisbon, with 56 tons of mineral ore, for Richardson and Co.; Pinson, from Llanplas, with 115 tons of zinc ore and 41 tons of lead ore, for Richardson and Co.; Zella, from Nevada, with 400 tons of phosphate of lime, for Vivian and Sons; Croydon, from Honderklop, with 570 tons of copper ore, for Richardson and Co.; Fergus, from Oporto, with copper and other ores, for Richardson and Co.; Glamorgan, from Llan, with 13 tons of silver ore, 80 tons of bar lead, and 742 tons of bar copper, for Richardson and Co.; Yuccedora, from Caldera, with 50 tons of copper ore, 277 tons of bar copper, 380 tons of silver ore, and 2 tons of nickel ore, for H. Bath and Son; Pearl, from Carloforte, with 330 tons of zinc ore, for H. Bath and Son; Tabina Helena, from Bilbao, with 250 tons of iron ore, for Holway Brothers; Avenir de Brest, from Bordeaux, with 90 tons of pitwood, for P. Beer and Co.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Feb. 23.—There is a certain degree of improvement in the demand for iron, and considerable hope that the peace which is confidently looked for as the result of the meeting at Versailles will be followed by an increased demand. The works are not, however, generally in full employment, and only a few firms are busy. The demand for coal is scarcely so brisk as it was, but the miners are well employed, and there are rumours of a demand for increased wages, but the season is rapidly approaching when this branch of industry will be less active.

Several failures have been announced in South Staffordshire of late. Samuel Hingley and Co., of the Corbyn's Hall Ironworks, Pensnett, have suspended payment. The liabilities are stated to amount to 25,000l., and the assets are not expected to amount to more than 5s. in 1l. This is probably another of the many failures in the iron trade which arise from persons entering into the trade with insufficient capital. Messrs. James and George Onions, ironmasters, of Dudley Port, are also calling their creditors together.

The forthcoming International Exhibition will receive considerable contributions from Staffordshire. The earthenware and porcelain of the Staffordshire Potteries will form a conspicuous, and it is believed a distinguished, feature in it; and from Shropshire the well-known firm of Messrs. Maw will show a variety of their encaustic tiles, and many other artistic forms of manufacture from clays of various colours, with great varieties of ornamentation produced by the employment of mineral glazes. The well-known Coalbrookdale are also preparing many specimens of their admirable productions, which are expected to take a prominent place, and fully to sustain the credit of the firm.

Mr. Isaac Spooner, the stipendiary magistrate for South Staffordshire, had before him on Tuesday, at Wednesbury, a case in which a miner claimed a fortnight's wages in lieu of notice from Charles Meacham, a chartermaster, working at the Mill Pool Colliery, West Bromwich. The complainant was working near a tree where there was evidently some danger of a fall, and some direction was given to him by the defendant that if he saw the tree move to stop working. The tree gave way, a fall took place, and a quantity of coal had to be removed before he could get out. He had to cease working, and claimed a fortnight's notice. The defence was that the accident was caused by the complainant's want of attention to orders; but the magistrate, after a careful consideration of the whole case, decided that he was put to work in a dangerous place, and ordered defendant to pay the fortnight's wages and the costs.

MIDLAND STEAM-BOILER INSPECTION AND ASSURANCE COMPANY. The following is a brief summary of the working of the company during the year 1870. At the close of the year 1870 there were under inspection 1319 boilers, and under assurance 131, making a total of 2557. These were tested for the following purposes—1263 in collieries and mines; 325 in ironworks, and 369 in mills of various kinds. The boilers were of the following general description—2395 fired externally, and 562 fired internally. During the year there have been made 13,436 examinations, of which 1801 have been internal, and 1699 in the flues. This shows that each boiler has been seen four or five times, and about three-fifths of the number examined inside and in the flues. Thirty-four engines have been indicated and reported upon, and in many cases great waste of fuel prevented. Among the explosions during 1870, seven of the boilers were under assurance—one exploded from "furrow" beneath angle iron; another from seam rip at old repair, both invisible by inspection; and the third from shortness of water. There have been four other explosions of assured boilers, too slight to include in the list; three were from the collapse of Cornish boilers from shortness of water, and the fourth from rupture of the side of a furnace boiler through accumulation of scale. One boiler exploded which had been under inspection, but several times refused to be unfitted for assurance.

The Dudley Correspondent of the *Wolverhampton Chronicle* writes:—"All the producers of 'marked' iron continue to command the list prices—common bars at the works, 8½; best bars, 9½; sheets, 9½; 10s.; doubles, 11½; nail sheets, 9½; latten, 12s. 10s.; boiler-plates, 9½; 10s.; rods, 8½; hoops, 9½; gas strip, 8½; 10s., and all other sorts in proportion, but for second-class and more inferior productions it is not so easy to fix quotations, which are governed in a great measure by the financial circumstances of the manufacturers, many of whom are underselling to a greater or less extent. The demand for pig-iron is hardly so brisk as it was, and prices are a shade easier, unless it is for well-known brands, which maintain quarter-day rates, and under any circumstances the producers have sufficient protection in their books and contracts to enable them to maintain three through the quarter. The demand for coal is not so brisk as it was, and as the season advances the trade will become still more inactive, especially for domestic purposes. The enquiries for the native ironstone of the district are becoming more numerous. A considerable quantity of hematite, hydrate, and oolitic iron ores is still brought into South Staffordshire and East Worcestershire, and to a greater or less extent affect the sales and prices of argillaceous ironstones of these localities. Some of the former ores, which are brought from Ironbridge and Froghall, are strongly impregnated with sulphur, and make red-hot, which is not so good for some particular purposes as the iron made from our native ores, and as a consequence these districts will always command a trade, if attention be paid to quality."

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Feb. 23.—There is no alteration in the state of the Iron Trade in Derbyshire, and the same may also be said with regard to the colliery interest. About an average tonnage of house and other coal is being sent by the Midland to London, and also to Birmingham and the West. The development of the minerals in the Unstone Valley, on the new line of railway between Sheffield and Chesterfield, is making rapid progress. Messrs. Rhodes and Son, who have one colliery in the locality, have just commenced sinking another one to the Silkstone seam, and it is expected will get ironstone in connection with the coal, so that there is every probability of furnaces being erected in the valley. Previous to the railway being formed Mr. Rangeley had a furnace for melting the local ore, but it had to make way for the line, and has not as yet been replaced. We may say about a mile or so from Unstone is Dronfield, where are the large ironworks of the Messrs. Lucas, one of the oldest firms in Derbyshire, so that in all probability any person making iron would not have to go very far for a market, whilst there would be the great advantage of having coal and coke on the spot.

The heavy departments, as well as most others, of the Sheffield trades, continue busy. Railway material, including rails, points, springs, buffers, tyres, and axles, are being largely produced, and the demand is likely to increase with the opening of the North of Europe ports. The heavy armour-plate mills are kept fully running, for ships' plates, turret shields, &c. The probable termination of the war does not appear to have in any way affected the trade in arms, and we hear of one large firm that is turning out about 40,000 rifle-barrels weekly, and it is said that orders are still coming in. In cutlery goods there is also a marked improve-

ment, both in table and spring knife goods. For wire there is a brisk demand for telegraph use, and a large quantity is now being made for the purpose of super-heating the hempen clothes-lines, the former being not only easily cleaned, but not liable to break, besides being very durable. There is now a strike of fork-grinders for an advance of wages, but it is not expected to last long.

In the Rotherham district business continues good, especially in plates for shields and rails, and for some description of castings. The collieries are also doing tolerably well, more especially in house coal. At Chapelthorpe and Thornecliffe a steady trade continues to be done at the foundries, whilst the pits are being fully worked, and turning out a large quantity of coal. There is a little more doing in hard coal from South Yorkshire, steam-vessels having commenced to run between Hull and Rotterdam and Hamburg. From Grimsby there is not much alteration with regard to shipments. The tonnage going to London has been kept well since the reduction of the rate, still the trade is in a very unsettled state, seeing that no one can tell how long the present state of affairs will last, so that colliery proprietors are unable to enter into contracts in advance. This state of suspense was not at all removed by the speech of the Chairman of the Great Northern at the meeting last week, when he stated that there was every probability of that line and the Midland shortly coming to an agreement relative to the rate. It is felt that any new arrangement between the two companies is not likely to be to the interest of the South Yorkshire collieries. The opening out of new furnaces in North Lincolnshire has led to an increased tonnage of coal and coke being sent there. Into Lancashire also there is more doing in engine fuel, a proof that the cotton trade is improving. Makers of coke are well supplied with orders, and more could be sold if made.

RATING OF COLLIERIES.—An important decision with respect to the rating of collieries was given by the Barnsley magistrates on Wednesday. Messrs. Craik and Co., the owners of the East Gawber Colliery, were summoned by the overseers for payment of poor-rates amounting to 14*l*. The firm, it was stated, had paid all their rates with respect to the colliery, except those for which they were summoned, which were levied on two acres of unworked coal which were leased by the firm. It was proved that the two acres of coal had not been touched, and they could not work it without putting down new workings. They had never derived any benefit from it, and they maintained it ought not to be rated. The magistrates adopted this view of the case, and dismissed the summons.

THE RAILWAY RATE FOR COAL TO LONDON.—The dispute between the Midland and Great Northern Railway Companies as to the rate for coal going over the two lines has entered upon a new and singular phase, and one that now places the colliery proprietors of South Yorkshire in the same position in which they were before the rates were reduced. Both companies are also losing some thousands of pounds weekly, and the only persons who appear to be reaping any advantage are the metropolitan coal merchants and dealers. At the meeting held in January, at Leeds, when the Great Northern directors invited the South Yorkshire colliery owners to meet them, the former declared their intention that for the future—at all hazards—the differential rate in favour of the coalowners of Derbyshire should not be more than 8*d*. per ton. That agreement has been maintained up to a short time since. But now the Midland company having made another reduction of 8*d*. a ton, the differential duty is again 1*s*. 4*d*. although the Great Northern is actually carrying coal at 2*s*. 3*d*. per ton less than in the early part of the year. The benefit given, in the first instance, by the Great Northern has practically been withdrawn, although the company is losing at least 5000*l*. a month. Such being the case, there appears to be no reason for the two companies fighting any further, as they are now in exactly the same position they were in before the dispute arose, or the arbitration before Sir John Kaye. It is felt that it is the coalowners of Derbyshire and North Yorkshire have received no advantage, and the two companies are throwing away about 15,000*l*. or 14,000*l*. every month. The South Yorkshire colliery proprietors are now determined to support most strenuously the new coal railway to London from the Manchester and Sheffield line at Lincoln to the Great Eastern. It has now passed the standing orders, and the Great Northern having withdrawn the opposition to it, there is every probability that it will be carried, and be a boon of no ordinary magnitude to the coalowners of South Yorkshire, and to the consumers in London.

A NEW HEATING FURNACE.

Mr. JOHN DONALD, iron merchant, Glasgow, has just patented a new heating furnace, which promises to eclipse all others yet introduced into Scotland, if the results so far obtained can be permanently depended upon. These results, the patentee informs us, are not of the nature of experiments. With some slight modifications, the furnace has been in operation on the Continent for a considerable time, although the first erected in Great Britain has only just been put up at the Lancelfield Forge, Glasgow, where it has realised all the expectations formed concerning it.

The advantages claimed for this furnace and its various modifications are these—

- 1.—A very considerable saving of fuel by a very good combustion on the grate, and consequently an almost entire consumption of smoke.
- 2.—By the mode of applying the blast an inferior class of coal can be used, tripping or riddled doors being quite sufficient to create a thoroughly good welding heat.
- 3.—The furnace occupies the smallest possible room, and having no chimney it can be placed in any part of the establishment.
- 4.—Being entirely above ground, and formed generally of one rivet, or casting, it can be shifted if necessary with little trouble or expense; or it can be placed upon walls, and thus made movable, the blast being conveyed to it by flexible pipes of leather or other material.
- 5.—The first cost is very much less than that of any draught or gas furnace; and from its simplicity of construction it is very easy to manage.
- 6.—The gas can be arranged so as to produce the highest temperature for welding purposes, and for a puddling or red heat for bending purposes. Moreover, from the position of the fire-place, and that the gas is introduced with a pressure, the heat in the furnace is uniform throughout.
- 7.—The gas escaping from the furnace may be used to heat pipes for "air heaters," which may be expedient in some cases; or to raise steam by the application of the boiler, which may be desirable in others. The pipes may be superseded by a tubular or other boiler, as may be found most convenient. Each fire-place is calculated to raise steam for at least 10-horse power.
- 8.—There is no risk whatever of explosion, the grate being perfectly free to the atmosphere. There is no disagreeable smell, as is frequently the case with other gas furnaces. The absence of any draught also lessens the wear of the interior very much, and in the case of the iron-heating furnace reduces the heat to a minimum.

The arrangement of the fire-place of this furnace renders it specially applicable to marine purposes, not only in respect of saving of fuel, which allows greater accommodation, but from the fact that they are capable of dispensing with the cumbersome funnel, which occupies the deck. Each fire-place requires about 500 cubic feet of air per minute under a slight pressure, which can easily be obtained from the fan used for the ventilation of the vessel. The apparatus for feeding is very simple, and the air passing through the flues and the tube with a pressure is brought into more immediate contact with these parts of the boiler. A greater heat it thus obtained than by draught alone, and the consumption of smoke will be so effectual that a much smaller chimney will be required.

The blast-pipes are made of sheet-iron for conveying the air into the ship under the grate, and at the same time feeding the funnel, regulated by a valve. The outside casing of the plate is of iron, rivetted to strong angle-iron at the top and bottom.

In one establishment on the Continent where the furnace has been in operation for a considerable time, the consumption of fuel was 35 cwt., and the production of plates was 68 cwt., during 24 hours, with 5 per cent. waste, as against 50 cwt. of coals and 161 cwt. plates, and 8 per cent. waste of an ordinary draught furnace, giving at the same time a result of 30 per cent. saving of fuel.

The management of the furnace is exceedingly simple. Live coals are put on the grate through the funnel. Continuous feeding is then commenced, with a quick blast, and as the combustion proceeds the blast is increased, care being taken to have it so strong as to blow the coals into the furnace; but the blast in the funnel must be regulated with regard to the blast below the grate, so that the gas cannot escape through the hole in the funnel. The heat in the furnace can be increased or diminished by raising or lowering the funnel. When the fire on the grate is quite lively, and between 4 and 6 in. high, the furnace should be fired by small quantities at a time, so that the gas may be clear, and the furnace kept full of it. The gas at the commencement is dark, but it quickly becomes clearer as the furnace increases in temperature, and at last, with good coal, gets quite white. The grate only requires to be cleaned once during each shift, in the following manner:—The blast is shut off by a valve, the door of the ash-pit is opened, the grate lowered, and through the hole in the funnel the walls are freed from slag with an iron rod. Then the door is closed, the grate lifted into its place, and the feeding of the furnace is resumed, with a quick blast as before, and after a few minutes the fire-place is again in good order. No special instructions are requisite with regard to the coal, except for welding purposes. It is important that they be free of dust, which would be

carried into the furnace by the blast. Soft coals are preferable, but not so soft that they would cake, and in pieces about the size of walnuts.

The following are some well ascertained results of the new furnace:—In a double heating furnace, with four fire-places, for rolling large sizes of bars and rails, the coal used was 75 cwt., the production of iron was 336 cwt., during the 24 hours, with 5 per cent. waste. Two draught furnaces, for the same purpose, produced 300 cwt. of iron with 100 cwt. of coal, and 10 per cent. waste, during the same time, giving 33 per cent. saving of fuel in the case of the gas furnace, independent of the saving in waste.

In a heating furnace with one fire-place, for rolling smaller sizes of bar-iron, the consumption of fuel during 24 hours was 20 cwt., with a production of 168 cwt. iron, and 5 per cent. waste; an ordinary furnace, taking 45 cwt. of coal for 100 cwt. of iron, and 8 per cent. waste, giving the large advantage of 73 per cent. in favour of the gas furnace. In the next furnace, which had two fire-places, and was specially constructed for Bessemer ingots, the consumption of coal during 24 hours was 35 cwt., and the production of rails was 336 cwt., making 3 per cent. waste. A draught furnace, for the same purpose, took 50 cwt. of coal during a like period to produce 200 cwt. of rails, with 5 per cent. of waste, affording an advantage in favour of the new furnace of 60 per cent.

The next furnace to which we shall allude was constructed for making plates, and measured 20 ft. long by 5 ft. wide. The furnace was adapted for heating plates intended for making sheets. There were two furnaces. The consumption of coal was generally about 40 cwt., during the 24 hours, and the sheets produced, depending on the size, averaged from 84 to 168 cwt. The same furnace, before being altered, had an ordinary fire-place and chimney for draught, and consumed generally 100 cwt. in giving the same production; but the plates were very unequally heated, while it was gratifying to see that with the new furnace a perfectly uniform heat was obtained.

The furnace at Lancelfield is fired by a boy, in the simplest possible manner. The dross is put down a cast-iron cone tunnel, turned and bored so as to form an air-tight joint. This furnace consumes its own smoke most effectually, and only requires about 15*l*. cwt. of coals in the 12 hours. The heat is got up by a little rotary engine, close at hand, which is made to drive a pair of fans. There is apparatus for generating the gas, as in the case of Siemens' furnace, apart from the furnace, and the required heat is got up fully sooner than by an ordinary furnace. The saving in first cost is very considerable, and reaches, we believe, fully 50 per cent.

The patentee has got orders from several shipbuilding firms on the Clyde to supply them with the new furnace, and altogether it promises to revolutionise to a greater or less extent the entire system of heating furnaces in Scotland.

EXPORTS OF RAILWAY IRON.—The exports of railway iron from the United Kingdom in January amounted to 40,502 tons, as compared with 68,652 tons in January, 1870, and 36,430 tons in January, 1869. The shipments to the United States in January amounted to 28,264 tons, against 24,610 tons in January, 1870, and 20,421 tons in January, 1869. No shipments were made to France in January, although in January, 1869, 1032 tons went in that direction. The great explanation of the diminished shipments of January is found, however, in the fact that British India only absorbed in that month 4455 tons, as compared with 21,070 tons in January, 1870, and 1672 tons in January, 1869. The value of the railway iron exported in January was 311,811*l*. as compared with 558,805*l*. in January, 1870, and 284,432*l*. in January, 1869.

STEAM-BOILER EXPLOSIONS.—In the House of Commons, on Wednesday, on the motion of Mr. Hick, the following gentlemen were appointed members of a Select Committee to enquire into the cause of steam-boiler explosions:—Sir T. Bazley, Mr. Tipping, Mr. Platt, Mr. J. Fielden, Capt. Beaumont, Mr. Birley, Mr. H. B. Sheridan, Mr. Cawley, Mr. Lancaster, Col. Gray, Dr. Lyon Playfair, Mr. Staveley Hill, Mr. McClure, Mr. Armitstead, Mr. Pim, Mr. Laird, Mr. Hermon, Mr. Miller, and Mr. Hick.

PREVENTION OF BOILER EXPLOSIONS.—At a recent meeting of the London Association of Foremen Engineers (Mr. J. Newton, Royal Mint, in the chair), an interesting and valuable paper on "Boiler Explosions: their causes, and the means of preventing them," was read by Mr. G. BELL GALLOWAY, in which he submitted that the origin of many boiler explosions arises from the generation of electricity. This may any day be proved with any boiler by electrical appliances, and it was, if he were not mistaken, first discovered and proved by an engineer many years ago at Gateshead-on-Tyne. He simply added, for their opinion, that in cases where electricity is formed in excess in steam-boilers, it is so formed by neglect in keeping the boilers clean over the furnaces, and by allowing the scaling to accumulate in them. His next suggestion or statement is more, in his opinion, to the point. He asserted that the chief cause of the boiler explosions which occur in boilers which are in working order will be found to have resulted from the absence of a sufficient quantity of atmospheric air in the water from which the steam is being generated. He asked the opinion of the Association on these points—boiler and life saving from explosions. First, as to his theory for the explosion of steam-boilers in properly constructed effective boilers whenever explosions have and may again occur; second, as to his proposed remedy by pumping atmospheric air into boilers with the feed water as contained in his patented invention. In a thoroughly practical discussion upon the paper, in which Messrs. Hedley, Ives, Bragg, Briggs, Irvine, Coates, Ramsdell, and the Chairman took part. The speakers, in the main, agreed with that gentleman's theory of accounting for many boiler explosions by the action of electricity, and admitted the vital importance of keeping the boilers clean, and forcing air into them with the feed water. In replying and noting the various points advanced by the several speakers, Mr. Galloway took occasion, as he said, to assume the position of philosopher for the time being. He asked the audience to ascend with him in imagination into the clouds to observe the formation and effects of electricity. He submitted that it was by the sun's power attracting the exhalations from the earth, from stagnant water, and putrid matters, that these exhalations are rendered explosive by the heat; the friction of the clouds passing caused the explosion of electricity and the report of the thunder consequent thereon, and just as here hatched we, though unseen by us, the same phenomena based upon natural laws as the cause of boiler explosions.

MR. HINDE PALMER'S PATENT LAW AMENDMENT BILL.—At the meeting of the Inventors' Institute, yesterday, the draft of this Bill, as prepared by Mr. Palmer, Q.C., M.P., was brought under the consideration of the council of the Institute by Mr. R. M. LATHAM, the Secretary, who explained that the principal points in the Bill were the proposed reduction to one-half of the present amount of the Government fees and stamp duties on patents up to the sealing, which by the Bill would amount to 12*l*. 10*s*., the third and seventh year's deferred annuities being abolished, and an annual Government charge of 5*l*. per annum being substituted. The other important points were the replacement of the Attorney and Solicitor General by special commissioners, who would be empowered to decide on the novelty of all applications for patents, and the proposition to enable patents to be registered as indisputable after due investigation upon their having existed unchallenged for three years, or survived the scrutiny of an action at law or suit in equity. A very important clause in the Bill was one enabling the commissioners to compel on such terms as they might deem just the granting of licences to use an invention to any person who felt himself aggrieved by the patentee keeping the trade under his invention entirely in his own hands. Mr. F. W. CAMPBELL, member of the council, stated that, although he would have liked the Bill to have provided for more thorough and radical changes in the law, still he considered it was a measure worthy of being supported by the inventor and the public. On the subject of compulsory licences, however, he considered there would be much difference of opinion; for his own part, he should not object to compulsory licences in cases where the patentee locked up an invention and made no use of it, or insufficiently supplied the public demand for it; but he thought the indiscriminate grant of compulsory licences would be most unfair, because manufacturers always evinced a disposition to wait till an inventor had opened the market to his invention, and they would under the Bill merely have to remain quiet till he had done so, and would then get a licence to use the invention on easy terms. It appeared to him that such a clause ought to receive most careful consideration from our statesmen and our inventors before it was placed on the Statute-book.

A TERRIBLE EXPLOSIVE AGENT.—A Correspondent, writing from Versailles, says—"Two days ago I was present in Fort Issy when some of the iron guns were to be destroyed, not by bursting them, but by breaking off their muzzles by a detonating explosion from outside—the only new thing that I have lately seen. The composition used is called 'lithofractor,' a hybrid word expressive of its qualities as an agent for blasting in mines. It is a patent belonging to Krebs and Co., said to be a form of nitro-glycerine, or at least to have that dangerous material as one of its ingredients. But 'lithofractor' is not considered dangerous, and it was certainly handled with extreme recklessness by the officers who used it. Small solid cylinders, not at all unlike Abel's gun-cotton in appearance, and about 6 in. long by 1 in. in diameter, are carried packed in a tin case, many of them together. When cold the cylinders are solid, but so soft as to be easily broken. When about to be used they are placed in a smaller tin case, and that is put into a vessel of hot water, so that they are warmed, but not wet. They soon become of a pasty consistency, and are kneaded into lumps of any size required. Two pounds weight was the amount used for each 65 lb. gun. The pasty mass was taken in the hand of the officer, and slapped on to the upper surface of the chase, near the muz-

zle. A layer of clay was then smeared over it, about an inch or two thick. Through this, and into the mass, was thrust a detonating fuse, which seemed to be simply a copper cap about 1½ in. long, half filled with detonating composition, the other half fitting on to the end of a piece of Bickard's fuse, or a fuse exactly like it. The officer lights the fuse, a couple of feet long, and sharp explosion is heard, and on dashing hastily out the curious gazers see that the muzzle has been broken off, and lies in several pieces on the ground. Once the explosion failed to break off the muzzle, but cracked the metal both on the upper and lower surface. If the detonating fuse is not used there is no dangerous explosion, and in this it is a small matter. To Abel's compressed gun cotton, perhaps that distinguished chemist will tell you the exact scientific term for the 'lithofractor.' I was unable to ascertain it from any of the officers present.

TREATING MANGANESE.—The invention of Mr. G. THOMSON, of Glasgow, consists, first, in reducing ores, oxides, or salts of manganese into the metallic state by heating them in a reverberatory or other suitable furnace in the presence of carbonaceous matter in a bath of or covered by a fused salt, such as sodium chloride or other chloride which is volatile at the temperatures employed. The invention consists, second, in making ferro-manganese by mixing or fusing together metallic manganese, obtained according to the first part of this invention, or otherwise, instead of manganese ores, oxides, or salts, as hitherto used with cast-iron, malleable iron, or steel, the metals being covered whilst being combined with a layer of a fused salt, such as sodium chloride or other suitable chloride.

TIN AND TERNE PLATES.—Mr. E. MOREWOOD, Rulton Ferry, causes every part of the surface of plates undergoing the process of coating to be in contact with the coating metals whilst acquiring their coating. In order to accomplish this, and give every part of the surface of each plate as short a length of time under the coating metal as is consistent with giving them a sound coating, he arranges the framing in a round pot, so that each plate shall fall into its separate and allotted space or division, which travels so that each plate is carried round to the exit side of the bath, and contact with any other plate or surface is as much as possible avoided.

CARBURETTING GASES.—The improved apparatus of Mr. E. C. MAILLET, Paris, is composed of a box of suitable metal, of any convenient form, containing a reservoir for the liquid, several cylinders (also of metal) placed in pairs, and communicating with each other either below or above, the upper ends of the said cylinders being perforated with small holes and covered by a dome-shaped cap. These cylinders or compartments have two bottoms, the upper one perforated and the lower one plain, and provided with a vertical tube; lastly, they are filled with pumice stone broken into pieces about the size of a nut, or with any other spongy matter which is unalterable by contact with the liquid employed. Above-named compartments being placed in two rows, each row connected by pipes to a small reservoir. Two other cylinders or compartments, having a single bottom, and capable of being opened at the top, are filled with cotton-wick not pressed closely; they communicate with each other, and one of them is in communication with one of the nearest of the compartments referred to, the other being provided with a tube, so as to allow the gas which it receives to escape.

PURIFYING GAS.—The invention of Mr. T. GRAY is based upon the use of some chemical substance which has a strong affinity for naphthalene, and which will seize hold of this latter substance and hold it in solution or a liquid state, so that it may be drawn off with facility from the purifiers. The inventor finds that most of the liquid hydrocarbons are capable of dissolving and absorbing the naphthalene, but as an example he uses either spirits of turpentine or liquid paraffin. He adds any convenient quantity of the hydrocarbon to a solution of caustic soda or other alkali which has an affinity for carbolic acid, and to this may be added other chemical ingredients for taking up the sulphur and ether, as well known.

AERIFORM FLUIDS.—Mr. E. FINCH, Chepstow, forms a case or box: prefers to make it of wrought-iron. On one side of this box he fixes a short cylinder; within this cylinder and concentric with it he causes a shaft rapidly to revolve. Upon this shaft he keys tight a cast-iron boss. On each side of this boss he fastens a circular disc of iron. These discs are about half the diameter of the cylinder. He attaches to them oblique vanes extending to but not actually touching the inside surface of the cylinder. The consequence is that when the shaft having the oblique vanes, as described is in rapid motion in one direction, it drives air into the case or box described through this passage, and from thence by pipes it may be guided to where it is required to be used or expelled.

PREVENTING BOILER PRIMING.—Mr. R. J. SCOTT, Brixton, proposes to fix over the man-hole, or the hole through which the steam passes from the boiler into the steam-chest, a perforated plate of metal or other suitable material in such a manner that it may be readily removed when required, and attaches thereto a receptacle covered in by a perforated lid, which receptacle he partly or wholly fills with small shingle or other similar or suitable substance, so that the steam on its road from the boiler to the steam-chest must pass through the said shingle or other similar or suitable substance, thus preventing the water accompanying it into the steam-chest. Or the said shingle or other similar or suitable substance, instead of being enclosed in a separate casing or receptacle, may be simply thrown loose into the steam-chest, but so as to completely cover over the said perforated plate, and thus compel the steam to pass through it, and in many cases this is found quite sufficient.

ROTARY ENGINES.—The invention of Mr. R. T. Y. JOHNSON, Stockton-on-Tees, consists of a cast-iron cylinder properly secured, and having cylinder covers bolted on the ends, through the stuffing boxes whereof a central shaft passes, working in bearings, which shaft has an eccentric piston thereof rigidly fixed. Outside the cylinder is fixed a chest for steam or power fluid containing a slot and stuffing box, in which a division plate travels, one end bearing steam-tight on the face of the eccentric piston, while the other is open to the action of the steam passing from the boiler to the valve chest. The steam gives motion to the plate and to the eccentric piston, the amount of travel or motion corresponding with the eccentricity of the piston. This plate separates the exhaust from the feed. In some cases the inventor uses two chests and two division plates.

OPEN STOCK EXCHANGE.—Quotations of the Sale on Feb. 21:—
Javali Company (Limited), fully paid, 10*s*. 5*d*.
Nevada Freehold Properties Trust (in Liquidation), certificates, fully paid, 1*s*. 2*d*. per certificate.
Rossa Grande Gold Mining Company (Limited), 15*s*. paid, 3*s*.
Tavaraux Mining Company (Limited), fully paid, 2*s*.

DOLCOATH.—During the past year tin has been sold to the value of 82,291*l*., and profit made amounting to 27,368*l*., just one-third of the total amount. Dividends have been paid during the last year alone to the extent of 492*l*. No less than 53,000 tons of tinstuff has been raised and stamped in 1955 tons of black tin, the average price of which during 1870 was 77*l*. 17*s*. 7*d*. per ton. During the past 17 years the adventurers have received profits amounting to not less than 214,125*l*.; whilst the lord of the manor has received during the same period no less than 43,044*l*. from a few acres of what would otherwise be barren waste. We may add that during the past few years the number of shares has been greatly sub-divided. A few years ago the whole of the mine was held by 98 shareholders, but they now number 271, being a threefold increase. In June, 1855, the dividend was 2*l*. per 179*l*. share only, but the adventurers are now receiving for the same share 12*l*. every two months. At Dolcoath Mine there are altogether about 500 men employed underground, and probably 600 above on surface. The average earnings of the underground men are about 3*l*. 8*s*. per month. The importance of a mine of this kind is indicated by the fact that more than 30,000*l*. a year is paid annually for wages, and probably from 100,000*l*. to 150,000*l*. to the various merchants and dealers. At the present time there are 232 heads of a stamp continually going at the mine, besides 24 heads of stamps which they can use occasionally. The consumption of coal is about 600 tons monthly.—*West Briton*.

J. TAYLOR AND CO., SHAREDEALERS, MINE AGENTS, &c.,
MINING EXCHANGE, SOUTH KING STREET,
MANCHESTER.

EXTRAORDINARY DISCOVERY OF LEAD ORE.
EAST LLANGYNOG MINING COMPANY
(LIMITED).

This mine continues to improve, and as it is now altogether out of the category of speculative mines, presents a very rare opportunity for investment. We can strongly recommend it to the investing public as a mine out of which very large profits may be made. We invite capitalists and others who wish to realise large profits to inspect the stones of solid lead ore now on view at our offices at the above address, weighing from 1 cwt. to 6½ cwt., out of a lode valued at 2500 per ton. There are five other powerful and well-defined lodes, two or three of which are in good ore, one yielding 2½ tons per ton. Taking into consideration the short time the company has been in existence, we do not know another in the kingdom presenting advantages anything approaching this mine.

We strongly recommend our friends at once to purchase the shares at the present low price at which they are offered, as we feel fully convinced that they will soon realise five or six times their present price.

The mine has been inspected by four or five first-class mining engineers—among whom is Capt. Thomas, for 20 years agent for the celebrated Llangynog Mine, which has paid in royalty alone over £800,000, and raised ore to the value of more than £6,000,000 sterling—all of whom agree that it is likely to become a lasting dividend-paying mine. Capt. Thomas and Capt. Julian—both of whom have had great experience in Welsh mining—consider it to be one of the best mines in the Principality of Wales.

Over 50 tons of lead ore is now broken, and would have been on the market by this time but for the severe frost preventing crushing and dressing operations. However, in about a fortnight or three weeks after the frost has disappeared this large pile of ore can be prepared. The lodes are opening up remarkably well, one of which is over 6 ft. wide, and there is every indication of this mine becoming one of the richest in the Principality.

A few shares may now be obtained, at £2 15*s*. per share, by early application to Messrs. J. TAYLOR and Co., Mining Exchange, South King-street, Manchester.

J. TAYLOR and Co. have also FOR SALE A FEW SHARES in the CWM RICKET LEAD MINING COMPANY (LIMITED), at £4 per share. At this mine the water-wheel, drawing machine, and crushers, which have for some time past been under preparation, are now nearly completed, and it is expected that sales of ore will very soon be made. Dressing operations have been going on for some time past.

The Cwm Ricket is in close proximity to the Van Mine, the shares of which have within a very short time advanced from £1 5*s*. to over £2½ per share.

IMPORTANT TO MINE OWNERS AND AGENTS.
WILLOUGHBY BROTHERS' PATENT STEAM ORE
STAMPER will shortly be READY FOR SALE.
Apply, for prices and particulars, to WILLOUGHBY BROTHERS, Foundry, Redruth; or Central Foundry, Plymouth.

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Messrs. G. W. AND T. CRAIK
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 In stock to select from, prices low, and ready for immediate delivery.

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 Made on an improved principle, up to 40-horse power.
STEAM DONKEY PUMPING ENGINES, from 2 in. up to 12 in., rams properly
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 All made in a good, strong, substantial, workman-like manner, of the best
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 ESTABLISHED 1840.

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THE TAVISTOCK FOUNDRY, IRON WORKS,
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 Who are in a position to MANUFACTURE ALL KINDS OF ENGINEERING
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 As well as selecting mechanics to erect the same.

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This company grants licenses, under their patents, for the use, singly or in
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 Stamps, Jiggers, Side-blow Percussion Tables, Classifiers, and Bubbles.
 The whole in combination are in successful operation at Rhoswydol Mines,
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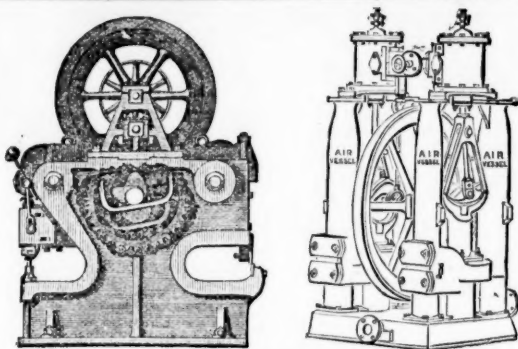
The Jiggers are largely used at the Van, and Caldbeck Fells Mines, with un-
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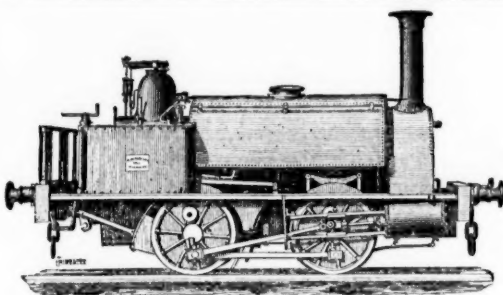
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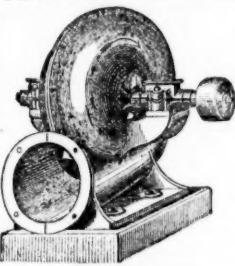
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Silent Fans, for blowing smiths' fires
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 EXHIBITION," in Dublin, 1865; at the "UNIVERSAL EXPOSITION," in
 Paris, 1867; and at the "GREAT INDUSTRIAL EXHIBITION," at Altona,
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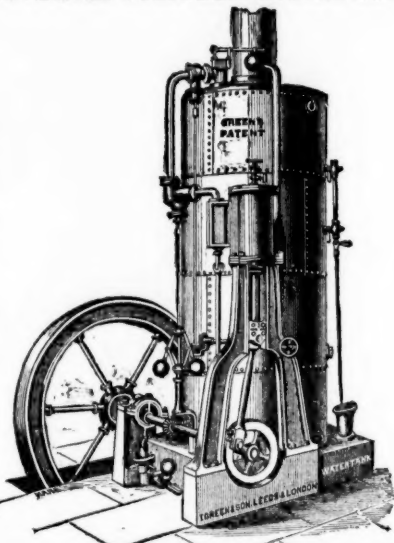
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 EVERY COIL OF FUSE MANUFACTURED BY THEM
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MAC ADAM BROTHERS AND CO., ENGINEERS, SOHO
FOUNDRY, BELFAST, after twenty years of experience, have brought
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 It is applicable to all practical heights of fall, giving much greater power
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 back-water.
 It is particularly well adapted for situations where the quantity of water is
 VARIABLE, and where all other wheels fail.
 Its motion is extremely regular, and, when desired, a governor can be applied
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 This wheel is at work in a great many places, to which references will be given.

GREEN'S PATENT BOILERS,
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Specially adapted for Contractors, Joiners, and Builders,
 Cabinet-makers, Bricklayers, Farmers, Mills, Dye-
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For Exportation they are invaluable, being sent out in
 complete working order, ready for
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The above Engines and Boilers are constructed in an exceedingly substantial
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From the very best quality of charcoal iron and steel wire.

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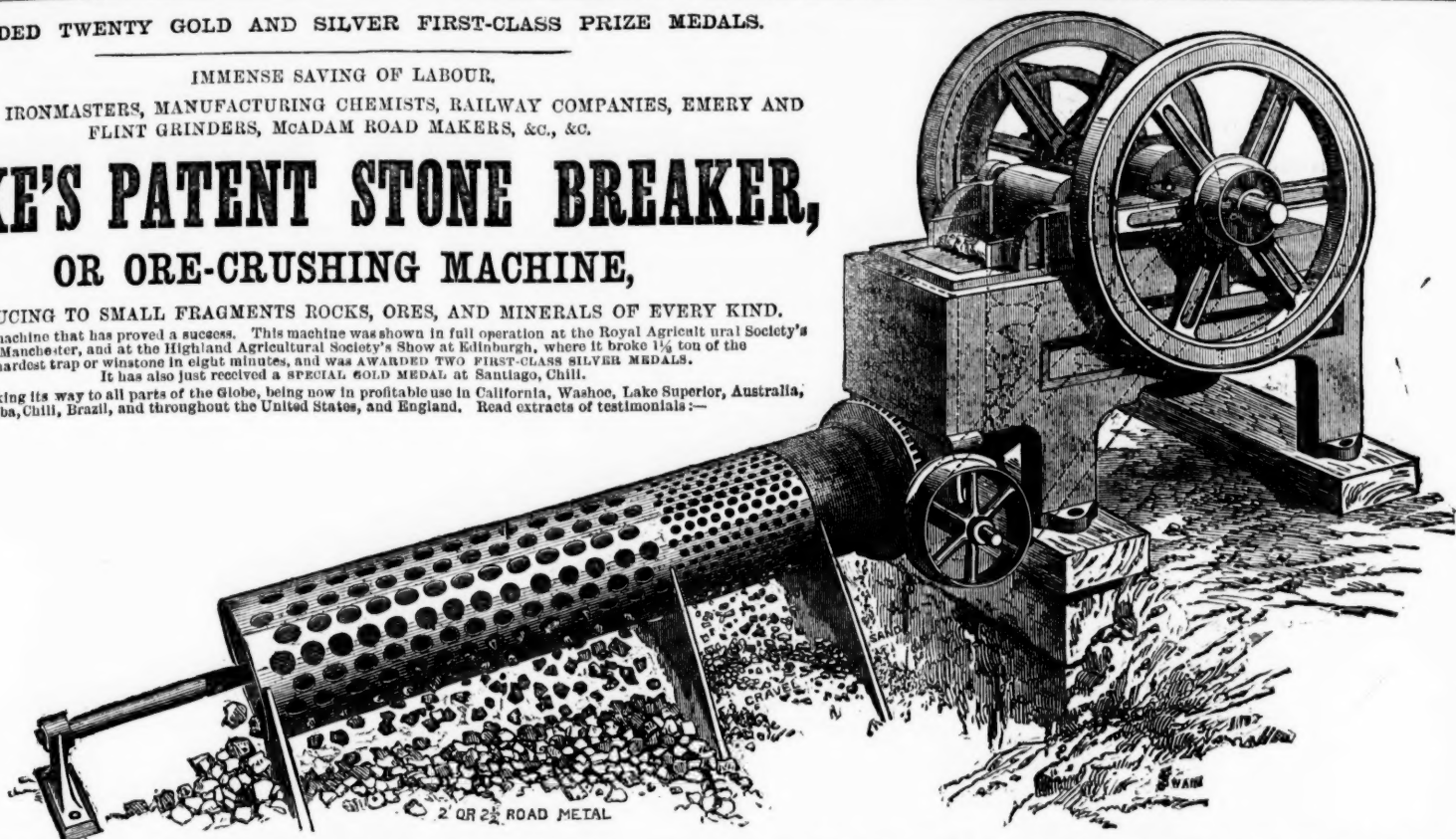
BLAKE'S PATENT STONE BREAKER, OR ORE-CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

This is the only machine that has proved a success. This machine was shown in full operation at the Royal Agricultural Society's Show at Manchester, and at the Highland Agricultural Society's Show at Edinburgh, where it broke $1\frac{1}{2}$ ton of the hardest trap or winstone in eight minutes, and was AWARDED TWO FIRST-CLASS SILVER MEDALS.

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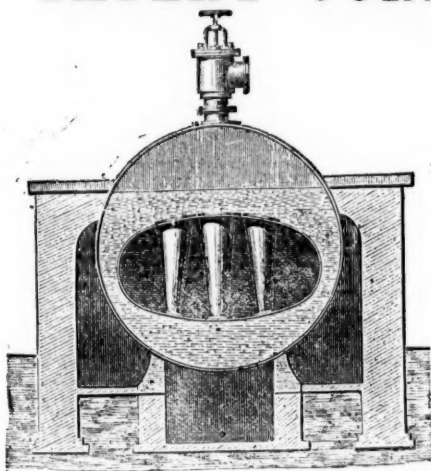
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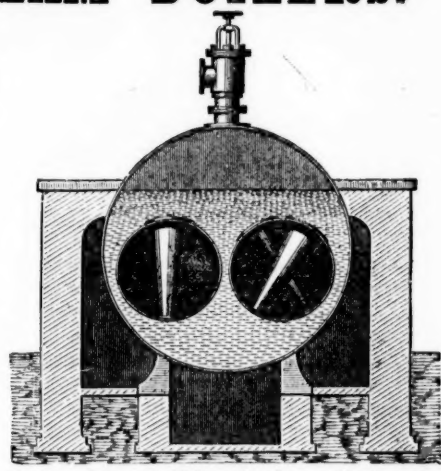
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BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500 Alderley Edge, Cheshire	10 0 0	—	—	—	10 6 8	0 5 0	Jan. 1869
6000 Boscawell, t. c. St. Just	1 0 0	—	—	—	0 2 0	0 2 0	Apr. 1870
2000 Botallack, t. c. St. Just	91 5 0	225	220 230	—	590 5 0	0 5 0	Feb. 1871
4000 Bronfild, t. c. Cardigan	2 10 0	—	23 1/2 23 1/2	—	2 11 0	0 1 0	Jan. 1870
2000 Brookwood, c. Buckfastleigh	1 10 0	—	—	—	0 15 0	0 2 6	Nov. 1870
5000 Bwch Consols, s. l. Cardigan	4 0 0	—	2 2 1/2	—	0 9 0	0 2 0	May 1870
6000 Cashwell, t. Cumberland	2 10 0	—	—	—	0 14 6	0 2 0	Dec. 1870
916 Cargill, t. Newlyn	16 5 7	—	2 1/2 3 1/2	—	16 15 0	0 10 0	Aug. 1869
2450 Cook's Kitchen, c. Illogan	19 14 9	23	19 1/2 20	—	5 5 6	0 12 6	Jan. 1871
867 Cwm Erwin, t. Cardiganshire	7 10 0	—	—	—	32 13 0	0 2 0	Oct. 1870
128 Cwmystwith, t. Cardiganshire	60 0 0	—	—	—	177 0 0	2 10 0	July 1869
2000 Derwent Mines, s. l. Durham	300 0 0	—	—	—	1149 0 0	4 0 0	Nov. 1870
1024 Devon Gt. Consols, c. Tavistock	1 0 0	105	97 1/2 102 1/2	—	7 10 0	0 15 0	Aug. 1870
1432 Ding Dong, t. Gwilt	49 14 6	—	—	—	254 2 6	3 0 0	Feb. 1871
1432 Dolcoath, t. c. Camborne	32 4 6	130	125 130	—	1 3 3	0 1 0	July 1870
12800 Drake Wallis, t. Cardigan	2 10 0	—	1 1/2 1 1/2	—	14 11 6	0 2 0	July 1867
6144 East Cardigan, c. St. Cleer	32 0 0	—	5 1/2 5 1/2	—	188 1 3	0 2 0	Nov. 1870
3000 East Darren, t. Cardiganshire	0 9 9	11	10 1/2 11	—	11 1 1	0 2 0	Sept. 1870
6400 East Pool, t. c. Pool, Illogan	0 9 9	32	30 31	—	14 16 2	0 2 0	Nov. 1870
1906 East Wheel Lovell, t. Wendron	25 0 0	—	—	—	77 5 0	0 10 0	Dec. 1870
2000 Foxdale, t. Isle of Man	3 18 8	—	—	—	4 8 0	0 2 6	Aug. 1870
3950 Frank Mills, t. Christow	3 10 6	—	—	—	0 3 0	0 3 0	Jan. 1868
15000 Great Laxey, t. Isle of Man	4 0 0	18	18 18 1/2	—	13 9 0	0 8 0	Dec. 1870
3000 Great Northern Manganese	5 0 0	—	—	—	15 12 0	0 3 6	June 1869
5908 Great Wheal Vor, t. c. Helston	40 0 0	—	4 1/2 5	—	0 10 6	0 1 0	Nov. 1870
10240 Gunnslake (Chitlers), t. c. c.	4 19 0	—	—	—	55 10 0	1 10 0	July 1870
1024 Herodfoot, t. near Liskeard	8 10 0	43	41 44	—	0 3 0	0 1 0	Nov. 1869
2000 Holmbush and Kelly Barr, c.	1 0 0	—	—	—	0 2 2	0 0 7	June 1870
1000 Killalee, t. Tipperary	1 0 0	—	1	—	1101 0 0	2 0 0	Aug. 1869
165 Levant, c. St. Just	10 8 1	—	—	—	629 0 0	2 0 0	Jan. 1870
4000 Llanur, t. Cardiganshire	18 15 0	—	—	—	4 0 0	0 5 0	Oct. 1868
3000 Maes-y-Safn, t. Flint	4 10 0	—	7 1/2 7 1/2	—	6 14 0	0 4 0	Jan. 1871
9000 Minera Mining Co., t. Wrexham	25 0 0	—	—	—	282 3 8	4 0 0	Nov. 1870
20000 Mining Co. of Ireland, c. t. c.	7 0 0	—	7 1/2 7 1/2	—	0 4 6	0 2 1	July 1870
6400 New Pembroke, t. c. Par Station	5 0 0	—	4 1/2 5	—	0 5 0	0 2 6	Nov. 1870
2000 North Wheal Crofty, c. Illogan	10 12 0	11 1/2	11 1/2 12	—	2 10 0	0 15 0	Feb. 1871
5610 Peniarth United, t. c. Camb.	3 11 3	—	2 1/2 3	—	0 4 0	0 1 6	Oct. 1870
256 Penrhyn, t. St. Agnes	86 0 0	60	55 60	—	15 0 0	0 5 0	Nov. 1870
5000 Penrhyn, t. c. Linkinhorne	5 0 0	—	5 6	—	1 16 6	0 3 0	Feb. 1871
2000 Poldice, t. c. Gwennap	10 0 0	—	—	—	468 10 0	7 0 0	Feb. 1871
12800 Prince of Wales, c. Calstock	0 12 6	1 1/2	1 1/2 1 1/2	—	1 10 0	0 10 0	Oct. 1870
1120 Providence, t. t. Uny Lelant	10 6 7	36	34 36	—	100 12 1	1 0 0	Dec. 1870
15000 Queen, s. c. Calstock	0 10 0	—	—	—	0 2 0	0 1 0	Dec. 1870
5869 Rosewell Hill & Ransom, t.	4 0 0	1 1/2	1 1/2 1 1/2	—	0 13 0	0 1 6	Dec. 1870
6120 South Cardigan, c. St. Cleer	1 5 0	260	230 250	—	659 10 0	4 0 0	Jan. 1871
6120 South Cardigan, c. St. Cleer	5 5 6	—	4 1/2 4 1/2 x d.	—	0 5 0	0 5 0	Feb. 1871
6000 South Darr, t. c. Camborne	3 0 0	—	—	—	1 1 6	0 1 6	Nov. 1870
937 South Wh. Crofty, c. Illogan	24 10 10	7	7 7 1/2	—	3 0 0	0 10 0	June 1870
496 So. Wh. Frances, c. Illogan	18 19 9	30	32 1/2 35	—	374 13 6	1 0 0	Mar. 1868
242 Spear Moor, t. St. Just	36 17 9	29	18 21	—	14 15 0	1 0 0	Oct. 1870
940 St. Ives Consols, t. St. Ives	10 15 0	—	—	—	0 10 0	0 10 0	May 1869
8771 St. Just Amalgamated, t.	3 10 0	—	—	—	0 5 0	0 2 6	Nov. 1870
12000 Tankerville, t. Salop	6 0 0	13	12 1/2 13	—	0 14 0	0 4 0	Jan. 1871
12000 Tankerville, t. Salop	9 0 0	50	48 50	—	27 8 6	1 10 0	Nov. 1870
2000 Tan-y-Foel, t. c. Pool, Illogan	11 10 0	22	21 22	—	12 7 0	0 15 0	Dec. 1870
15000 Tarn, t. Llanidloes	11 10 0	—	—	—	3 10 0	0 15 0	Dec. 1870
3000 W. Chiverton, t. Perranzabuloe	106 15 0	30	30 35	—	47 6 2	0 2 0	Nov. 1870
512 West Wheal Frances, t. Illogan	106 15 0	30	30 35	—	47 6 2	0 2 0	Nov. 1870
400 W. Wheal Seton, c. Camborne	47 0 0	125	125 135	—	67 10 0	2 10 0	Feb. 1871
412 Wheal Bassett, c. Illogan	5 2 6	60	40 50	—	682 10 0	1 0 0	June 1868
512 Wheal Jane, s. l. Kea	10 15 0	45	47 1/2 50	—	33 10 0	1 10 0	Nov. 1870
1024 Wheal Killy, t. Uny Lelant	8 10 6	—	9 1/2	—	6 0 6	0 7 6	Feb. 1871
1024 Wheal Margaret, t. Uny Lelant	8 10 6	—	9 1/2	—	13 7 6	—	—
1024 Wheal Mary Ann, t. Menheniot	8 10 6	—	9 1/2	—	78 15 0	0 10 0	Nov. 1870
1000 Wh. Mary Hutches, t. Plymouth	2 12 6	—	12 14	—	71 10 0	0 10 0	Dec. 1870
80 Wheal Owles, t. St. Just	70 0 0	—	—	—	0 10 0	0 5 0	Aug. 1869
12000 Wheal Russell, c. Tavistock	1 0 0	—	—	—	474 13 0	0 10 0	Nov. 1870
396 Wheal Seton, t. c. Camborne	60 0 0	25	21 24	—	254 15 0	2 0 0	Feb. 1869
17000 Wicklow, c. t. Wicklow	2 10 0	—	—	—	50 2 6	0 2 6	Sept. 1870

FOREIGN DIVIDEND MINES.

35000	Alamillos, t. Spain	2 0 0	2 1/2	1 1/2 2 1/2	—	0 13 0	0 2 6	Oct. 1870
15000	Almaden & Tinto Consolidated, s. l.	1 0 0	—	1 1/2	—	0 1 6	0 1 6	Oct. 1870
20000	Anglo-Australian, c. South Australia	7 7 6	—	—	—	0 1 6	0 6 6	Aug. 1868
15000	Cape Copper Mining	7 0 0	17	16 17	—	5 17 6	0 10 0	May 1870
15000	Central American Association	0 15 0	—	—	—	0 6 0	0 1 0	July 1869
20000	Colorado Terrible, s. l. Colorado	5 0 0	4 1/2	4 1/2 4 1/2	—	0 2 6	0 2 6	Nov. 1870
10000	Copiapu Mining Co., Chile	16 10 0	3	2 3	—	0 4 0	0 4 0	Apr. 1869
76162	Don Pedro North del Rey	0 14 0	2 1/2	2 1/2 2 1/2	—	1 19 0	0 9 0	Feb. 1869
70000	English and Australian, c.	2 10 0	—	—	—	2 2 10	0 2 0	Oct. 1870
25000	Fortuna, t. Spain	2 0 0	2 1/2	2 1/2 2 1/2	—	10 percent.	—	—
10000	Gonnexa, t. Sardinia	5 0 0	—	—	—	0 1 10	0 6 6	Nov. 1870
10000	Kaplan & Nippon Co., Austr.	1 0 0	3 1/2	3 1/2 3 1/2	—	12 13 4	0 5 0	Oct. 1870
10000	Miners, t. Spain	3 0 0	3 1/2	3 1/2 3 1/2	—	10 percent.	—	—
10000	Panuello, c. Chile	3 0 0	2 1/2	1 1/2 2 1/2	—	7 8	1 15 6	Nov. 1870
10000	Pontebaud, s. f. France	90 0 0	15	—	—	6 percent.	—	—
10000	Port Phillip, g. Clunes	1 0 0	1	1 1 1/2	—	81 10 0	5 1 6	Jan. 1871
10000	Scottish Australian Min. Co., t.	1 0 0	7 1/2	7 1/2 7 1/2	—	0 12 0	0 4 0	Feb. 1871
10000	St. John del Rey, Brazil	15 0 0	24	22 24	—	0 9 7	0 7 7	Feb. 1871
10000	Sweetland Creek, g. California	4 0 0	4	4 4 1/2	—	—	—	—
70	Victoria (London) [26000 £1 pd.]	26000	12s. 6d. pd.]	—	—	—	—	—